

## Goldman Sachs: Risk Management and the Residential Mortgage Market

### I. Executive Summary

The financial crisis has been a humbling experience for every participant in the financial system. The events of the past few years have put a particular focus on risk management, its failures and its economic implications.

At Goldman Sachs, we have dealt with both the challenges of navigating the crisis itself and with questions about our actions before and during the crisis. Our risk management and business practices in the mortgage market have received much attention. In that connection, we would like to make the following points:

- Goldman Sachs did not take a large directional “bet” against the U.S. housing market, and the firm was not consistently or significantly net “short the market” in residential mortgage-related products in 2007 and 2008, as the performance of our residential mortgage-related products business demonstrates.
- Goldman Sachs was not a dominant participant in the residential mortgage-related products market. The firm’s net revenues from residential mortgage-related activities were very small, both in total and relative to the rest of our business. In fact, from 2003 to 2008, annual net revenues attributable to mortgage-related products, commercial and residential, never exceeded approximately 2% of the firm’s overall net revenues. In fiscal year 2007, the firm had less than \$500 million of net revenue from residential mortgage-related products –approximately 1% of the firm’s overall net revenues.
- Goldman Sachs did not have access to any special information that caused us to know that the U.S. housing market would collapse. In fact, as a result of the spread of the crisis from subprime to all residential mortgages, Goldman Sachs had overall net losses of approximately \$1.7 billion with respect to residential mortgage-related products for fiscal year 2008.
- Goldman Sachs did not engage in some type of massive “bet” against our clients. The risk management of the firm’s exposures and the activities of our clients dictated the firm’s overall actions, not any view of what might or might not happen to any security or market.
- We maintained appropriately high standards with regard to client selection, suitability and disclosure as a market maker and underwriter. As a market maker in the mortgage market, we are primarily engaged in the business of assisting clients in executing their desired transactions. As an underwriter, the firm is expected to assist the issuer in providing an offering document to investors that discloses all material information relevant to the offering.

- Goldman Sachs' risk management decisions were motivated not by any collective view of what would happen next, but rather by fear of the unknown. The firm's risk management processes did not, and could not, provide absolute clarity; they underscored deep uncertainty about evolving conditions in the U.S. residential housing market. That uncertainty dictated our decision to attempt to reduce the firm's overall risk.
- Goldman Sachs sold Collateralized Debt Obligations ("CDOs") principally to large financial institutions, insurance companies and hedge funds with a focus on this type of product.<sup>1</sup> These investors had access to highly detailed information that allowed them to conduct their own independent research and analysis.
- Goldman Sachs never created mortgage-related products that were designed to fail. It is critical to remember that the decline in value of mortgage-related securities occurred as a result of the broader collapse of the housing market. It was not because there were any deficiencies in the underlying instruments. The instruments performed as would have been expected in those unexpected circumstances.

There are valuable lessons to be learned from the financial crisis in general, and the collapse of the mortgage market in particular. It is critical that we and other financial institutions learn the right lessons, if we are to avoid future crises in the financial system.

## II. Goldman Sachs as Market Maker

At the heart of Goldman Sachs' sales and trading business is our role as a "market maker." As a market maker, the firm stands ready, willing and able to buy and sell financial instruments at the initiation of our clients. Goldman Sachs' clients expect the firm to do so, regardless of whether the other side of a transaction has been identified or is readily available. In light of the global and complex nature of markets, it would be very difficult for companies, institutions and governments to raise capital, manage their risks and fund their operations without financial institutions committing their capital on behalf of clients.

Our clients' needs are the single biggest factor driving Goldman Sachs to accept risk. The exposures created through transactions with clients are part of the overall "inventory" of instruments we generally carry as part of our business. These risks -- like market price, volatility and credit -- all must be actively managed. Once the firm transacts with a client, thereby taking on an exposure, our most effective risk management tool is to enter into a transaction that counterbalances the risk we have just assumed. In many cases, however, this can be difficult because of imperfect, mismatched or unavailable offsetting exposures. Nevertheless, Goldman Sachs' clients expect the firm to stand ready to transact in all market conditions.

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<sup>1</sup> A corporate-related pension fund that had long been active in this area also made a purchase of less than \$5 million.

### III. Goldman Sachs' Participation in the Residential Mortgage Market

Goldman Sachs' residential mortgage-related business consists of structuring, trading, underwriting and distributing mortgage- and asset-backed related products. These products include loans, securities and derivatives backed by residential real estate loans.

The residential mortgage-backed security (RMBS) is one such product. Through an RMBS, pools of home loans are structured into a security, with the underlying mortgage loans serving as collateral and providing income to the investors in the security.

A Collateralized Debt Obligation (CDO) pools various RMBS and other income-producing assets into different tranches with varying degrees of risk. The most senior tranches carry the least risk of default and, in turn, provide the lowest interest rate to the investor. In a "synthetic" CDO, two parties enter into a derivative transaction, which references particular assets. By the very nature of a synthetic CDO, one counterparty must be long the risk (i.e., hoping to benefit from an increase in the value of the referenced assets), and the other counterparty must be short the risk (i.e., hoping to benefit from a decrease in the value of the referenced assets).

Goldman Sachs has not been a significant participant in the market for originating mortgages. In fact, the number of loans originated by Goldman Sachs, which acquired a small originator in March 2007, never exceeded one-tenth of one percent of total domestic residential mortgages.

In structuring and underwriting RMBS, Goldman Sachs often purchased the underlying loans from banks and other lenders. In other cases, Goldman Sachs acted as an underwriter for securitizations of the loans of mortgage originators. In both situations, Goldman Sachs engaged in a due diligence process to examine (i) the counterparty, (ii) loan level credit, (iii) compliance and (iv) property valuation.

In this context, the firm was acting as an underwriter of financial instruments, rather than a market maker. A market maker is primarily engaged in the business of assisting clients in executing their desired transactions. This business is client-driven, and serves an intermediary function. Goldman Sachs strives to provide a fair price to our clients.

In contrast, an underwriter of financial instruments works with the issuer in connection with offering financial instruments to investors. In this context, federal securities laws effectively impose a "gatekeeper" role on Goldman Sachs: as an underwriter, the firm is expected to assist the issuer in providing an offering document to investors that discloses all material information relevant to the offering.

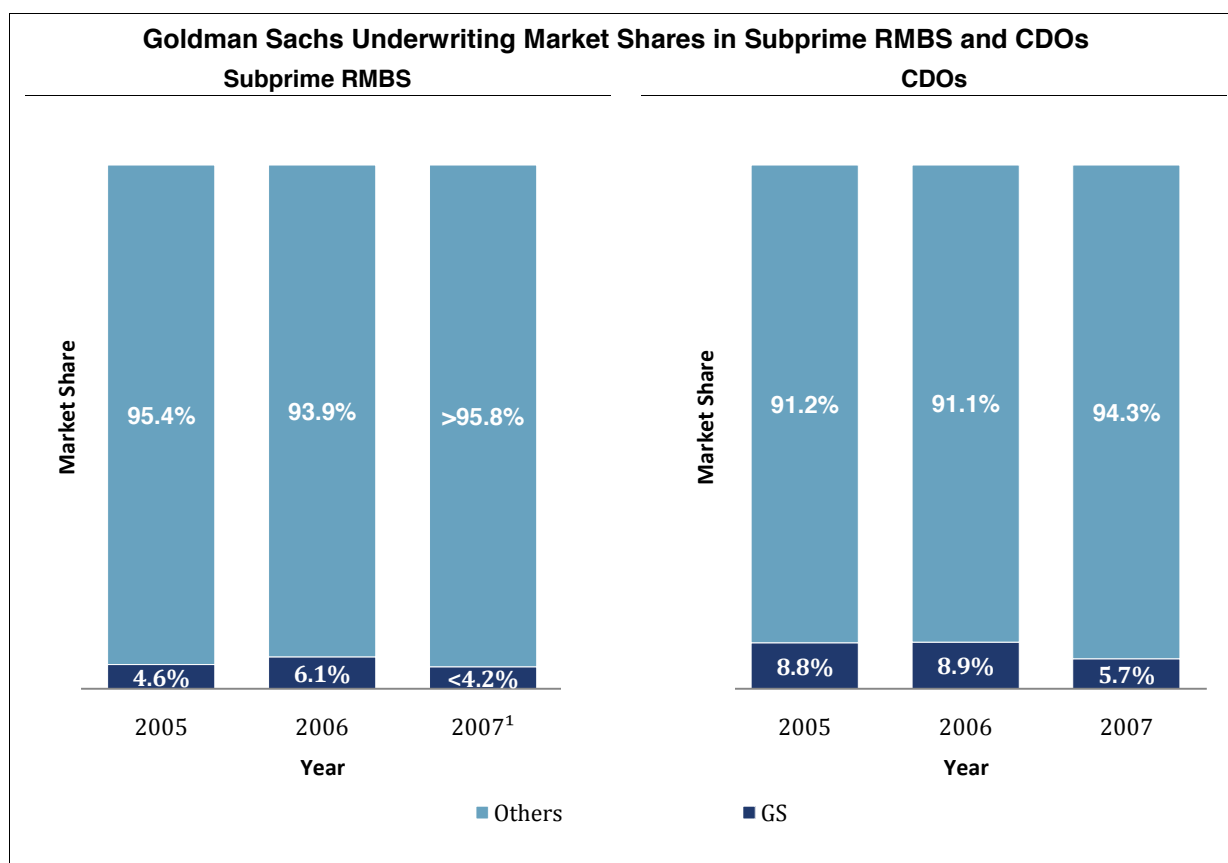
In connection with our underwriting of residential mortgage-related securities, Goldman Sachs had a process to examine the management, relevant policies and procedures, underwriting standards, creditworthiness and other aspects of each mortgage originator before the firm began purchasing loans for securitization. As a result of these reviews, we determined not to do business with dozens of originators and suspended our business relationships with many more.

The firm also employed internal and third-party resources to conduct due diligence on the individual loans in the pools backing the securities in our RMBS offerings, including reviewing selected loan files, verifying compliance with state and federal lending statutes, and selective review of property appraisals against comparable values. As a result, Goldman Sachs generally did not accept loans that, based on our review and analysis, appeared to have potentially significant legal, regulatory compliance or other issues. Knowing what we know today, of course, we wish we had done even more.

Regardless of the degree of due diligence performed by underwriters in connection with RMBS securitizations, however, they cannot and do not guarantee payment, performance or any rate of return. Rather, it is up to the purchaser of securities to evaluate whether the securities are worthy of investment based on the purchaser's own view and analysis of the securities' value in light of the purchaser's expectations about the future of the housing market and the economy. Importantly, in the case of asset-backed securities, the disclosures set forth in the firm's offering documents included detailed descriptions of the underlying assets.

#### IV. Goldman Sachs' Position in the Residential Mortgage and CDO Markets

Goldman Sachs certainly was not the dominant participant in the residential mortgage securities underwriting market. The firm entered this market space relatively late, with a small amount of customer activity and without a significant mortgage origination business.





Sources: *Inside Mortgage Finance and Asset Backed Alert*GS

<sup>1</sup>For 2007, *Inside Mortgage Finance* published market share data for only the top 10 underwriters. The 10th largest underwriter in 2007 was Bank of America with a 4.2% market share. As Goldman Sachs did not appear in the top 10, we can deduce that it had a market share of less than 4.2%.

## V. Risk Management

### A. Getting “Closer to Home”

The foundation of Goldman Sachs’ approach to risk management is disciplined mark-to-market accounting. This involves the daily practice of valuing the firm’s assets and liabilities to current market levels – that is, the value one might expect to find on the open market. Without a transparent and realistic insight into our own financial position, Goldman Sachs would not be able properly to assess or manage our risk. It was mark-to-market accounting that spurred Goldman Sachs to reduce the firm’s risk in the residential mortgage market near the end of 2006.

As a result of this firmwide discipline, Dan Sparks, then head of the mortgage department, was able to tell senior members of the firm in an email on December 5, 2006, that the “Subprime market [was] getting hit hard... At this point we are down \$20mm today.”<sup>2</sup>

For senior management, the emergence of a pattern of losses, even relatively modest losses, in a business of the firm will typically raise a red flag. Concerned by increasing volatility and repeated daily losses in the firm’s mortgage business P&L, David Viniar, the firm’s Chief Financial Officer, convened a meeting of the firm’s senior mortgage traders and risk managers on December 14, 2006. At that time, Goldman Sachs had a net long exposure to subprime, prime and other residential mortgage risk. It was agreed during the meeting that the firm should reduce its overall exposure to the subprime mortgage market – getting, in effect, “closer to home.” To be clear, Mr. Viniar did not instruct the mortgage business to take a particular directional view on the subprime mortgage market. Nor did Mr. Viniar prohibit the mortgage business from taking short positions or becoming net short. Instead, Mr. Viniar’s guidance to the mortgage department was to not take a significant directional position -- short or long -- in any direction and to do its best to reduce the size of the department’s overall positions in the subprime market.

In a December 15, e-mail to Tom Montag, then co-head of the Securities Division, Mr. Viniar recounted the meeting of the day before, stating, “Dan and team did a very good job going through the risks. On ABX<sup>3</sup>, the position is reasonably sensible but is just too big. Might have to spend a little to size it appropriately. On everything else my basic message was let’s be aggressive distributing things [i.e., reducing risk] because there will be very good opportunities as the markets goes into what is likely to be even greater distress and we want to be in position to take advantage of them [i.e., opportunities].”<sup>4</sup> In an email two days later, Dan Sparks updated senior management: “We made progress last week, but still more work to do...Below shows risk reduction trade[s].”<sup>5</sup>

<sup>2</sup> GS MBS-E-010930468 (December 5, 2006 e-mail from Dan Sparks to Tom Montag, et al.) (All “GS MBS-E references are to materials provided to the Permanent Subcommittee on Investigations.)

<sup>3</sup> ABX is an index that tracks the performance of subprime residential mortgage bonds.

<sup>4</sup> GS MBS-E-009726498 (December 15, 2006 e-mail from David Viniar to Tom Montag)

<sup>5</sup> GS MBS-E-009726143 (December 17, 2006 e-mail from Dan Sparks to Tom Montag, et al)

In an e-mail to the firm's senior management on February 14, 2007, Mr. Sparks outlined the efforts to reduce long risk that his department had commenced:

Over the last few months, our risk reduction program consisted of:

- (1) selling index outright
- (2) buying single name protection
- (3) buying protection on super-senior portions of the BBB/BBB- index (40-100% of the index).<sup>6</sup>

On February 22, 2007, Mr. Sparks sent an e-mail to several people on the mortgage desk urging them to continue getting closer to home, including reducing short positions:

We need to buy back \$1 billion single names and \$2 billion of the stuff below – today. I know that sounds huge, but you can do it – spend bid/offer, pay through the market, whatever to get it done. It is a great time to do it – bad news on HPA, originators pulling out, recent upticks in unemployment, originator pain. I will not want us to trade property derivatives until we get much closer to home as it will be a significant distraction from our goal. This is a time to just do it, show respect for risk, and show the ability to listen and execute firm directives.<sup>7</sup>

Attempting to reduce its overall risk to subprime residential mortgage-related securities meant that the firm at various times would find itself net short, though not significantly so.

## B. Concerns about Short Positions

It was well known that housing prices were weakening in early 2007. But no one knew when the market would reach bottom and whether values would continue to fall, rebound, or at least stabilize at levels where buyers of residential subprime mortgage-related securities would receive their full interest and principal payments. The impact of subprime mortgage-related securities on the housing market and broader economy was similarly unclear. In March 2007, Federal Reserve chairman Ben Bernanke told lawmakers that “the impact on the broader economy and financial markets of the problems in the subprime market seems likely to be contained.”<sup>8</sup> Other policy makers and economists repeated this assertion through the summer and early fall, while still others took the reverse view.

Goldman Sachs continued to attempt to reduce its risk in the subprime market and to move to a more balanced position, which at various times caused the firm to have a net short bias. At the time, however, there was no internal consensus on the future of the subprime residential housing market. On one hand, for instance, Josh Birnbaum, a managing director in the mortgage department, believed very strongly that the firm should take a larger net short position. On the other hand, there was a concern among some that the firm might be too short, as emails from the time period reflect:

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<sup>6</sup> GS MBS-E-010989331 (February 14, 2007 e-mail from Dan Sparks to Tom Montag, et al)

<sup>7</sup> GS MBS-E-010381411 (February 22, 2007 e-mail from Dan Sparks to Josh Birnbaum et al.)

<sup>8</sup> Testimony of Federal Reserve Chairman Ben Bernanke before the Joint Economic Committee of the US Congress, March 28, 2007.

- Gary Cohn, the firm's President and Chief Operating Officer, remarked in a March 6, 2007 e-mail that "A big plus would hurt the Mortgage business but Justin thinks he has a big trade lined up for the morning to get us out of a bunch of our short risk[.]"<sup>9</sup>
- Dan Sparks noted on March 8, 2007 that "Aside from the counterparty risks, the large risks I worry about are... [c]overing our shorts. We have longs against them, but we are still net short."<sup>10</sup>
- On March 14, 2007, Tom Montag told Lloyd Blankfein that the firm "[c]overed another 1.2 billion in shorts in mortgages – almost flat – now need to reduce risk[.]"<sup>11</sup>
- On April 11, 2007, Mr. Sparks received an estimate of the mortgage department's exposure to certain products and noted to Kevin Gasvoda, a member of the department: "Subprime down 3mm from shorts? Is that right and are we too short?" Mr. Gasvoda replied: "Yes. Subprime has near zero loans and is short some mez abx and \$2B aaa abx[.] [T]he aaa short is painful . . . . Plan is to chip away at covering on every chance."<sup>12</sup>

During this period, the mortgage department covered more than \$2.8 billion in single-name short positions. Even though these short positions proved profitable when viewed in isolation, this meaningfully reduced the firm's net exposure to subprime residential mortgages by several billion dollars -- in effect, getting the firm closer to home. In addition, by March, the firm's net long exposure to prime and other residential mortgages had grown as a result of meeting client needs in the mortgage market.

### C. Different Views In The Firm

In the spring of 2007, there was continued debate amongst senior managers about the direction of the residential mortgage market.<sup>13</sup> For instance, on March 14, Jon Winkelried e-mailed Mr. Sparks, and others, indicating that the firm should be prepared for a downturn in the performance of securities backed by prime loans and asked what it was doing to insulate itself from losses.<sup>14</sup> Mr. Sparks replied: "Trying to be smaller... We are also short a bunch of sub-prime AAA index for jump risk protection."<sup>15</sup>

<sup>9</sup> GS MBS-E-009686278 (March 6, 2007 e-mail from Gary Cohn to senior management).

<sup>10</sup> GS MBS-E-009718900 (March 8, 2007 e-mail from Dan Sparks).

<sup>11</sup> GS MBS-E-009685739 (March 14, 2007 e-mail from Tom Montag to Lloyd Blankfein).

<sup>12</sup> GS MBS-E-010952383-85 (April 11, 2007 e-mail from Dan Sparks to Kevin Gasvoda).

<sup>13</sup> GS MBS-E-009718900 (March 8, 2007 e-mail from Daniel Sparks to Jon Winkelreid, et al).

<sup>14</sup> GS MBS-E-009718239 (March 14, 2007 e-mail from Jon Winkelried to Lloyd Blankfein, et al).

<sup>15</sup> GS MBS-E-009718239 (March 14, 2007 e-mail from Dan Sparks to Jon Winkelried, et al).

Richard Ruzika, a senior Securities Division partner, on the other hand, replied:

It does feel to me like the market in general underestimated how bad it could get. And now could be overestimating where we are heading. . . . While undoubtedly there will be some continued spillover, I'm not so convinced this is a total death spiral. In fact, we may have terrific opportunities. Dan's team is working hard (literally around the clock) so we have a shot at them . . . .<sup>16</sup>

As Mr. Ruzika's e-mail indicates, Goldman Sachs carefully monitored our short positions and explored the possibility of increasing long positions and other opportunities in the mortgage markets if market conditions appeared favorable. The firm even explored the possibility of buying interests in, or pools of assets from, subprime originators. In a March 9, 2007 e-mail that Gary Cohn subsequently forwarded to Lloyd Blankfein, Dan Sparks discussed potential investments that the firm might make in subprime originators.<sup>17</sup> The firm also continued to respond to client requests to sell mortgage securities and submit bids on long positions. Various bids were accepted by clients, and the firm took on additional long risk.

In the third quarter of 2007, the subprime mortgage market deteriorated further. As David Viniar stated in the third quarter earnings conference call, "The mortgage sector continues to be challenged and there is a broad decline in the value of mortgage inventories during the quarter. As a result, we took significant markdowns on our long inventory positions during the quarter as we had in the previous two quarters. However, our risk bias from that market was to be short and that net short position was profitable."<sup>18</sup> The firm, however, did not amass a large net short position to "bet against the housing market." For the quarter, the firm's net revenues from residential mortgage-related activities were less than 5% of its total revenues.

Some in Goldman Sachs' mortgage business began to argue that the firm should consider buying more mortgage assets, believing that prices may have bottomed. For example:

- In an e-mail on August 20, 2007, Mr. Sparks told Mr. Winkelried (and others) that "We think it is now time to start using balance sheet and it is a unique opportunity with real upside—specifically for AAA RMBS." Mr. Sparks also said that he was going to devise a "plan describing the opportunity and parameters (including funding and risk) relating to buying billions."<sup>19</sup>
- In an August 21, 2007 e-mail, Josh Birnbaum told Tom Montag and others, "The mortgage department thinks there is currently an extraordinary opportunity for those with dry powder to add AAA subprime risk in either cash or synthetic form."<sup>20</sup>

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<sup>16</sup> GS MBS-E-009718239 (March 14, 2007 e-mail from Richard Ruzika to Dan Sparks, et al).

<sup>17</sup> GS MBS-E-009656302 (March 9, 2007 e-mail from Dan Sparks to Gary Cohn et al, forwarded to Lloyd Blankfein)

<sup>18</sup> Goldman Sachs Earnings Conference Call dated Sept. 20, 2007, at 3.

<sup>19</sup> GS MBS-E-011035212 (August 20, 2007 e-mail from Dan Sparks to senior management)

<sup>20</sup> GS MBS-E-009721274 (August 21, 2007 e-mail from Josh Birnbaum to Tom Montag, et al)

In late August, the mortgage department again purchased \$350 million in triple-B ABX and covered \$150 million in single-name shorts. Without greater clarity on the direction of the housing market, the firm sought to maintain a balanced position in the subprime mortgage market. A mortgage presentation to the Board of Directors, dated September 17, 2007, shows the subprime mortgage position on a notional basis and indicates a substantially balanced position.<sup>21</sup>

#### D. End of 2007/Beginning of 2008

On November 18, 2007 Lucas van Praag, global head of Corporate Communications, sent an e-mail to Lloyd Blankfein and Gary Cohn about a *New York Times* article suggesting that Goldman Sachs profited on the subprime market collapse.<sup>22</sup> Mr. Blankfein responded, “Of course we didn’t dodge the mortgage mess. We lost money, then made more than we lost because of shorts. Also, it’s not over, so who knows how it will turn out ultimately.”<sup>23</sup> Mr. Cohn qualified, “We were just smaller in the toxic products.”<sup>24</sup>

A November 2007 document entitled “How Did GS Avoid the Mortgage Crisis,” prepared for David Viniar in advance of earnings conference calls, summarized the firm’s position following our prudent risk reduction efforts. After outlining the actions in late 2006 and early 2007, the document states:

However, one should not be lead [sic] to believe that we went through this period unscathed and somehow significantly profited from a ‘bet’ on the downturn in mortgage markets. The actions that I outlined led to significant write downs in the value of our long mortgage inventory over the course of this year. We mentioned during our second quarter conference call that a weak quarter in Mortgages contributed to lower results in our FICC businesses. A better characterization of the situation is that we effectively avoided greater losses by taking these proactive steps and in fact during the third quarter we were able to make money on mortgages as a result of our net short position.<sup>25</sup>

By November 30, 2007, Goldman Sachs’ net exposure to subprime residential mortgages was balanced. The firm’s prime and other residential mortgage exposure continued to be long cash instruments of approximately \$13.5 billion.

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<sup>21</sup> GS MBS-E-001793915-930 (September 17, 2007 presentation to Board of Directors at p. 6.)

<sup>22</sup> GS MBS-E-009671378 (November 18, 2007 e-mail from Lucas van Praag to Lloyd Blankfein, et al.)

<sup>23</sup> GS MBS-E-009671378 (November 18, 2007 e-mail from Gary Cohn to Lloyd Blankfein, et al.)

<sup>24</sup> GS MBS-E-009671378 (November 17, 2007 e-mail from Lloyd Blankfein to Lucas van Praag, et al.)

<sup>25</sup> GS MBS-E-009713204-07 (Goldman Sachs internal document, “How Did GS Avoid the Mortgage Crisis.”)

For much of 2007, Goldman Sachs and most other market participants, economists and policy makers believed that the credit crisis was contained to the subprime mortgage market. During this period, the firm continued market making and underwriting activities in residential mortgages, which resulted in an increase in prime and other residential mortgage exposure. Unfortunately, in 2008, it became clear that these other asset classes were deteriorating as well. For the fiscal year ending November 2008, although profitable overall, the deterioration of these asset classes was a meaningful contributor to the firm's overall net loss of approximately \$1.7 billion in residential mortgage-related products.

#### E. Increases in Value at Risk (VaR)

Throughout the course of our risk-reduction efforts starting in late 2006, the mortgage department experienced periodic spikes in VaR, or "Value at Risk." VaR is a risk metric that measures the potential loss in value of trading inventory due to adverse moves in the market over a defined period of time. The key inputs to VaR are the size and type of positions in the respective assets (both long and short) as well as the volatility of the underlying assets. Between November 24, 2006 and February 23, 2007, daily VaR in the mortgage department increased from \$13 million to \$85 million, predominantly from increases in volatility.<sup>26</sup>

Increases in VaR were the result of dramatic fluctuations in the mortgage market (which had a corresponding effect on VaR), not an effort on the part of Goldman Sachs to take a large directional bet on the subprime market. In fact, because of the volatility of the markets, the increases in VaR occurred despite efforts by the firm to reduce our overall exposure to the mortgage market.

In a February 14, 2007 e-mail, Dan Sparks wrote, "Over var due to massive spike in subprime volatility and we are working with bruce on that. Over limit on cre loan scenario list but will correct next week with large securitization pricing. Over limit on cdo risk but that will adjust as moving positions to desks. Bad week in subprime."<sup>27</sup>

A February 21, 2007 e-mail from Mr. Sparks to Jon Winkelried described the volatility in the subprime market:

We are net short, but mostly in single name CDS and some tranching index vs the some [sic] index longs. We are working to cover more, but liquidity makes it tough. Volatility is causing our VAR numbers to grow dramatically.<sup>28</sup>

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<sup>26</sup> GS MBS-E-010037310 (Mortgage VaR Change (Q1'07 vs. Q4'06))

<sup>27</sup> GS MBS-E-002203268 (February 14, 2007 e-mail notes taken by Dan Sparks)

<sup>28</sup> GS MBS-E-010381094 (February 21, 2007 e-mail from Dan Sparks to Jon Winkelried)

That volatility continued into the summer of 2007, as Bill McMahon, then COO & Head of Risk Management for the Securities Division, communicated to Gary Cohn and David Viniar in an email on August 15, 2007:

The volatilities and correlations among our assets are really driving the swings in var right now. Robert Berry [the firm's Chief Market Risk Officer] sent out a note last night indicating that the sensitivity of our var models to correlations suggests that the var can swing between 140 and 160 without any changes in the complexion of our trading books – essentially, it is noise. The only solution is to reduce the size of the books, which is what we are working on with mortgages and credit trading.<sup>29</sup>

VI. The Effect of Goldman Sachs' Risk Management on Our Profits and Losses During the Financial Crisis

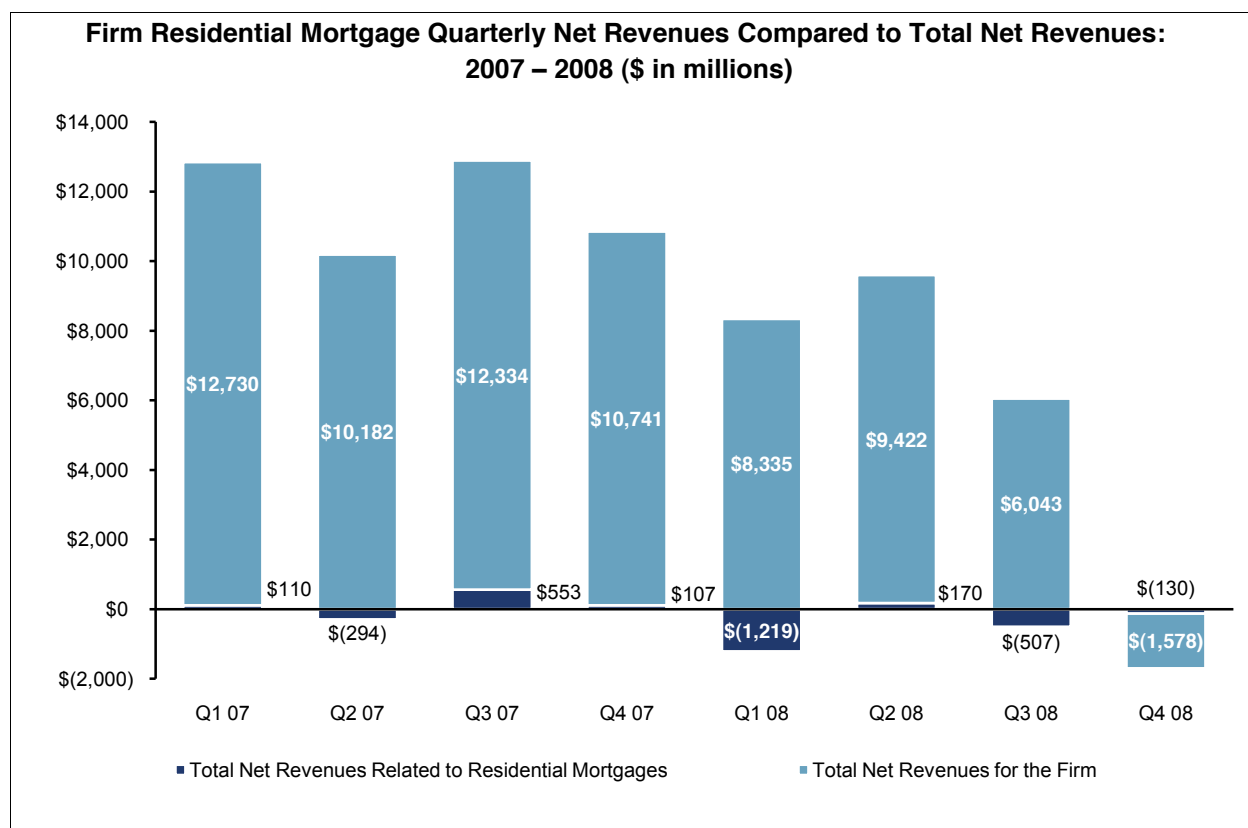
Given the deteriorating performance of the mortgage market in 2007 and 2008 and the corresponding decline in the value of mortgage-related products, the best and most relevant proof of whether Goldman Sachs had a large net short position is our actual revenues in mortgages. The relative consistency of revenues underlines the firm's on-going market making activities and prudent risk management– not a massive proprietary, directional view of where the market might have been headed.

The firm's mortgage-related positions had a relatively small effect on our net revenues or profits for fiscal year 2007. The firm had net revenues of less than \$500 million from our residential mortgage-related products business in 2007. During fiscal year 2008, the firm had net losses of approximately \$1.7 billion related to our residential mortgage-related products business.

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GS MBS-E-009778573 (August 15, 2007 e-mail from Bill McMahon to Gary Cohn and David Viniar)



As Lloyd Blankfein and Gary Cohn explained in a letter to shareholders on April 7, 2010, “The firm did not generate enormous net revenues or profits by betting against residential mortgage-related products, as some have speculated; rather, our relatively early risk reduction resulted in our losing less money than we otherwise would have when the residential housing market began to deteriorate rapidly... Although Goldman Sachs held various positions in residential mortgage-related products in 2007, our short positions were not a ‘bet against our clients.’ Rather, they served to offset our long positions. Our goal was, and is, to be in a position to make markets for our clients while managing our risk within prescribed limits.”<sup>30</sup>

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Goldman Sachs 2009 Annual Report, letter to shareholders.



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**From:** Tourre, Fabrice  
**Sent:** Tuesday, January 23, 2007 11:34 PM  
**To:** Serres, Marine  
**Subject:** Fw: ft--friday

Darling you should take a look at this article... Very insightful... More and more leverage in the system, l'edifice entier risque de s'effondrer a tout moment... Seul survivant potentiel, the fabulous Fab (as Mitch would kindly call me, even though there is nothing fabulous abt me, just kindness, altruism and deep love for some gorgeous and super-smart French girl in London), standing in the middle of all these complex, highly levered, exotic trades he created without necessarily understanding all the implications of those monstrosities !!! Anyway, not feeling too guilty about this, the real purpose of my job is to make capital markets more efficient and ultimately provide the US consumer with more efficient ways to leverage and finance himself, so there is a humble, noble and ethical reason for my job ;) amazing how good I am in convincing myself !!!

Sweetheart, I am now going to try to get away from ABX and other ethical questions, and immediately plunge into Freakonomics... I feel blessed to be with you, to be able to learn and share special things with you, I love when you advise me on books I should be reading, I feel like we share a lot of things in common, a lot of values, topics we are interested in and intrigued by... I just love you !!!

Your chtit Fab

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Sent from my BlackBerry Wireless Handheld

----- Original Message -----  
From: Chin, Edwin  
To: ficc-mtgcd-traders  
Sent: Mon Jan 22 19:36:04 2007  
Subject: ft--friday

The unease bubbling in today's brave new financial world

By Gillian Tett

Published: January 19 2007 02:00 | Last updated: January 19 2007 02:00

Last week I received an e-mail that made chilling reading. The author claimed to be a senior banker with strong feelings about a column I wrote last week, suggesting that the explosion in structured finance could be exacerbating the current exuberance of the credit markets, by creating additional leverage.

"Hi Gillian," the message went. "I have been working in the leveraged credit and distressed debt sector for 20 years . . . and I have never seen anything quite like what is currently going on. Market participants have lost all memory of what risk is and are behaving as if the so-called wall of liquidity will last indefinitely and that volatility is a thing of the past.

"I don't think there has ever been a time in history when such a large proportion of the riskiest credit assets have been owned by such financially weak institutions . . . with very limited capacity to withstand adverse credit events and market downturns.

"I am not sure what is worse, talking to market players who generally believe that 'this time it's different', or to more seasoned players who . . . privately acknowledge that there is a bubble waiting to burst but . . . hope problems will not arise until after the next bonus round."

He then relates the case of a typical hedge fund, two times levered. That looks modest until you realise it is partly backed by fund of funds' money (which is three times levered) and investing in deeply subordinated tranches of collateralised debt obligations, which are nine times levered. "Thus every €1m of CDO bonds [acquired] is effectively supported by less than €20,000 of end investors' capital - a 2% price decline in the CDO paper wipes out the capital supporting it."

"The degree of leverage at work . . . is quite frankly frightening," he concludes. "Very few hedge funds I talk to have got a prayer in the next downturn. Even more worryingly, most of them don't even expect one."

Since this message arrived via an anonymous e-mail account, it might be a prank. But I doubt it. For, while I would not normally write an article about responses to an article (it is the journalist's equivalent of creating derivatives of derivatives) I am breaking this rule, since I have recently had numerous e-mails echoing the above points. And most of these come from named individuals, albeit ones who need to stay anonymous, since they work for institutions reaping profits from modern finance.

There is, for example, a credit analyst at a bulge-bracket bank who worries that rating agencies are stoking up the structured credit boom, with dangerously little oversight. "[If you] take away the three anointed interpreters of 'investment grade', that market folds up shop. I wonder if your readers understand that . . . and the non-trivial conflict of interest that these agencies sit on top of as publicly listed, for-profit companies?"

Then there is the (senior) asset manager who thinks leverage is proliferating because investors believe risk has been dispersed so well there will never be a crisis, though this proposition remains far from proven. "I have been involved in [these] markets since the early days," he writes. "[But] I wonder if those who are newer to the game truly understand the impact of a down cycle?"

Another Wall Street banker fears that leverage is proliferating so fast, via new instruments, that it leaves policy officials powerless. "I hope that rational investors and asset prices cool off instead of collapse, like they did in Japan in the 1990s," he writes. "But if they do, monetary policy will be useless."

To be fair, amid this wave of anxiety I also received a couple of "soothing" comments. An analyst at JPMorgan, for example, kindly explained at length the benefits of the CDO boom: namely that these instruments help investors diversify portfolios; provide long-term financing for asset managers and reallocate risk.

"Longer term, there may well be a re-pricing of assets as the economy slows and credit risk increases," he concludes. "But, there is a very strong case to be made that the CDO market has played a major role in driving down economic and market volatility over the past 10 years." Let us hope so. And certainly investors are behaving as if volatility is disappearing: just look at yesterday's remarkable movements in credit default swaps. But if there is any moral from my inbox, it is how much unease - and leverage - is bubbling, largely unseen, in today's Brave New financial world. That is definitely worth shouting about, even amid the records now being set in the derivatives sector.

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Very insightful...More and more leverage in the system, the entire system is about to crumble at any moment...The only potential survivor, the fabulous Fab.

.

---

**From:** Serres, Marine  
**Sent:** Wednesday, March 07, 2007 6:43 AM  
**To:** Tourre, Fabrice  
**Subject:** RE: Diner...

And right now, I'd love nothing more than just curl in your arms, feel the warmth of your skin and just stay there smiling for hours (with occasional - frequent- tender kisses... ;)

Reveille toi doucement mon amour...

Ta chtite puce

-----Original Message-----

**From:** Serres, Marine  
**Sent:** Wednesday, March 07, 2007 8:21 AM  
**To:** Tourre, Fabrice  
**Subject:** RE: Diner...

Oh sweet heart, by just implying that you have a good feeling about coming over here,

I'M JUST THE HAPPIEST WOMAN ON EARTH !!!!!!!!!!!!!!!!!!!!!!!!!!!!!

Je viens de faire 45min de torture physique ce matin, et du coup mon petit corps est un peu verroulu, mais ca me donne toujours un peu la peche pour la journee... Mais lire ton mail, savoir que je peux esperer un jour pas trop lointain, de me reveiller dans tes bras chaque matin, voir tout l'amour du monde dans tes yeux et te le rendre au centuple, chaque jour... C'est une dose d'amphetamines derniere generation ! ;)

JE T'ADORE FAB,

Can't wait to whisper sweet words in your ears in a few hours...

-----Original Message-----

**From:** Tourre, Fabrice  
**Sent:** Wednesday, March 07, 2007 4:18 AM  
**To:** Serres, Marine  
**Subject:** Diner...

Interessant, je te donnerai plus de details live sur ce dont on a parle mais le resume de la situation n'est pas tres folichon pour le US subprime business... According to Sparks, that business is totally dead, et les pauvres petits subprime borrowers vont pas faire de vieux os !!!

Tout ceci me donne des idees pour mon futur a moyen terme, dans la mesure ou je n'ai pas l'intention d'attendre l'explosion totale du secteur et le debut du distressed trading, je pense qu'il pourrait y avoir des choses un peu plus interessantes a faire en Europe...

J'en ai parle cet apres midi avec Nartey, qui comme bien entendu m'a confirme qu' "il adorerait que je sois a Londres, ce qui faciliterait enormement la communication avec New York et pousserait la sales force Europeenne a se concentrer sur les risques structured finance..."

I need to go to London for at least a week in April, get a better sense for the opportunity, but I am getting more and more convinced...

Gazillion kisses chtite puce, je veux pas te donner de faux espoirs mais j'ai un bon pressentiment ;)

-----  
Sent from my BlackBerry Wireless Handheld

**GS MBS-E-00666041-2**

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From: Serres, Marine  
Sent: Wednesday, March 07, 2007 6:43 AM  
To: Tourre, Fabrice  
Subject: Dinner...

**And right now, I'd love nothing more than just curl in your arms, feel the warmth of your skin and just stay there smiling for hours (with occasional – frequent- tender kisses... ; )**

Wake up slowly my love...

Your chitite darling

---

From: Serres, Marine  
Sent: Wednesday, March 07, 2007 8:21 AM  
To: Tourre, Fabrice  
Subject: Dinner...

**Oh sweet heart, by just implying that you have a good feeling about coming over here,**

**I'M JUST THE HAPPIEST WOMAN ON EARTH!!!!**

I just went through 45 minutes of physical torture this morning, and as a result my little body is a little worm-eaten, but it always makes me feel a little better during the day...But reading your email, knowing that I can hope to in a day not too far off, wake up in your arms every morning, see the love of the whole world in your eyes and reciprocate it hundredfold, every day...It's a last generation dose of amphetamines ! ; )

I ADORE YOU FAB,

**Can't wait to whisper sweet words in your ears in a few hours...**

---

From: Tourre, Fabrice  
Sent: Wednesday, March 07, 2007 4:18 PM  
To: Serres, Marine  
Subject: Dinner...

Interesting, I will give you more details in person on what we spoke about but the summary of the US subprime business situation is that it is not too brilliant...**According to Sparks, that business is totally dead**, and the poor little subprime borrowers will not last so long!!!

All this is giving me ideas for my medium term future, insomuch as I do not intend to wait for the complete explosion of the industry and the beginning of distressed trading, I think there might be more interesting things to do in Europe...

I spoke about this this afternoon with Nartey, who naturally confirmed that 'he would love if I were in London, which would greatly facilitate communication with New York and would push the European sales force to concentrate on the risks of structured finance...'

**I need to go to London for at least a week in April, get a better sense for the opportunity, but I am getting more and more convinced...**

**Gazillion kisses chtite puce,** I don't want to give you false hopes but I have a good feeling ; )



.

---

**From:** Tourre, Fabrice  
**Sent:** Wednesday, June 13, 2007 1:00 PM  
**To:** Serres, Marine  
**Subject:** Re: Good morning sunshine

I just did... Will call you in a bit

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

**From:** Serres, Marine  
**To:** Tourre, Fabrice  
**Sent:** Wed Jun 13 12:29:48 2007  
**Subject:** RE: Good morning sunshine

Made it to UK sweetheart ?

-----Original Message-----

**From:** Tourre, Fabrice  
**Sent:** Wednesday, June 13, 2007 4:04 PM  
**To:** Serres, Marine  
**Subject:** Re: Good morning sunshine

Just made it au pays de tes clients preferres !!! Je viens d'ailleurs de vendre qqes bonds abacus a des veuves et orphelins que j'ai croises dans l'aeroport, decidentement ces belges adorent les synthetic abs cdo^2 !!!

Am in great shape, ready to hold you in my arms tonite...

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

**From:** Serres, Marine  
**To:** Tourre, Fabrice  
**Sent:** Wed Jun 13 09:05:34 2007  
**Subject:** RE: Good morning sunshine

Bien arriv  au pays des belges darling? Hope you slept a lot and look forward to many many many live tender moments tonight to ease the jet lag... ;)

-----Original Message-----

**From:** Tourre, Fabrice  
**Sent:** Wednesday, June 13, 2007 12:30 PM  
**To:** Serres, Marine  
**Subject:** Re: Good morning sunshine

Marine Serres

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Just made it to the country of your favorite clients [Belgians]!!! I'm managed to sell a few abacus bonds to widows and orphans that I ran into at the airport, apparently these Belgians adore synthetic abs cdo2

1

> >  
> > fab  
> >  
> > -----Original Message-----  
> > From: Fatiha Boukhtouche [mailto:fb2204@columbia.edu]  
> > Sent: Thursday, February 01, 2007 4:36 PM  
> > To: Tourre, Fabrice  
> > Subject: RE: As discussed, 24 hours later...  
> >  
> > ok pour ce week-end...! demain? samedi?  
> >  
> > Quoting "Tourre, Fabrice" <Fabrice.Tourre@gs.com>:  
> >  
> > > Diner this weekend ? Or are you already busy ?  
> > >  
> > > -----Original Message-----  
> > > From: Fatiha Boukhtouche [mailto:fb2204@columbia.edu]  
> > > Sent: Thursday, February 01, 2007 11:17 AM  
> > > To: Tourre, Fabrice  
> > > Subject: RE: As discussed, 24 hours later...  
> > >  
> > > Je vois que ta journee n'a pas ete legere hier encore... mon  
> > > pauvre!  
> > > mais ca va pas mieux a ton boulot? Ou c'est ton age  
> > > jurassique  
> > > qui t'a  
> > >  
> > > encore bloque la? Courage, on a depasse la fin de la  
> > > semaine,  
> > > encore  
> > > 1.75 jour a tenir avant le we...  
> > >  
> > > Avant-hier, j'etais bloque ds le couloir a la porte de ma  
> > > chambre,  
> > > DANS mon apart... cette porte s'est lockee toute seule...  
> > > j'avais  
> > > juste tire la porte de l'exterieur...  
> > >  
> > > Bon alors, pour repondre a la fin de ton mail, mon coco,  
> > > soyons  
> > > clairs: TU me dois une bouffe, suite a un pari que j'ai  
> > > magnifiquement  
> > >  
> > > gagne... haut la main dois-je dire!!! Apres, que je te doive  
> > > une  
> > > bouffe pour any retard de paiement, on en rediscute qd tu  
> > > veux... mais  
> > >  
> > > n'espere pas que tu vas echapper a ton pari perdu!  
> > > he he ;))  
> > > Bon, maintenant que les choses sont clarifiees... C'est le we  
> > > prochain  
> > >  
> > > que je pars a SLC, du 9 au 12 feb. Donc, on schedule cette  
> > > bouffe  
> > > (meritee je le repete!!!) quand tu veux, je pense que t plus  
> > > busy que  
> > > moi, de ton jour sera le mien! Let me know!  
> > >  
> > > bisous bisous,  
> > >  
> > > fatiha  
> > >  
> > >  
> > > Quoting "Tourre, Fabrice" <Fabrice.Tourre@gs.com>:

> > >  
> > > >  
> > > > Tu etais bloquee a l'exterieur de ton appart, ou bien a  
> > > l'exterieur de  
> > >  
> > > > ta chambre ???? Ca m'est arrive une fois egalement, bloque  
> a  
> > > > l'exterieur de mon appart en revenant d'une soiree en  
> semaine  
> > > vers 2am  
> > >  
> > > > un peu bourre, et mon superintendant comme par hasard avait  
> > > disparu,  
> > > > j'avais bataille pendant au moins une heure avant de  
> reussir  
> > a  
> > > rentrer  
> > >  
> > > > chez moi...  
> > > >  
> > > > Anyway, still at work, completement creve avec encore une  
> > > journee  
> > > > roller coster, je suis un legume autant physiquement que  
> > > moralement,  
> > > > et ce n'est que le milieu de la semaine !!!  
> > > >  
> > > > Au fait, c'est ce weekend ou tu dois partir skier a Park  
> > City,  
> > > ou bien  
> > >  
> > > > c'est le weekend prochain ? Faut qu'on schedule cette  
> bouffe  
> > > que tu me  
> > >  
> > > > dois, vu que maintenant tu as un chequier...  
> > > >  
> > > > Bizzzzzzzes  
> > > >  
> > > > Fab  
> > > >  
> > > >  
> > > > -----Original Message-----  
> > > > From: Fatiha Boukhtouche [mailto:fb2204@columbia.edu]  
> > > > Sent: Wednesday, January 31, 2007 8:28 PM  
> > > > To: Tourre, Fabrice  
> > > > Subject: RE: As discussed, 24 hours later...  
> > > >  
> > > > Encore un temps mort... 1/2 heure a attendre... j'ai  
> faim...  
> > > bon,  
> > > > j'arrete de te raconter ma vie ininteressante... tu dois  
> etre  
> > > tout  
> > > > busy toi!!!  
> > > >  
> > > > bizzzz  
> > > >  
> > > > Quoting Fatiha Boukhtouche <fb2204@columbia.edu>:  
> > > >  
> > > > > Ca doit etre mes bonnes ondes ;) Ravie de savoir que de  
> > ton  
> > > > cote  
> > > > > c'est plus calme!!! De mon cote ca ne l'est pas  
> vraiment...  
> > > > J'ai

```
> > > > > dejeuner a 4h, 20 mille trucs a faire aujourd'hui, j'en ai
> > > fait
> > > la
> > > > moitie, il est presque 6h... et la j'ai du temps "mort"
> car
> > > > j'attends
> > > > la fin d'une incubation... je voudrais faire une
> > > > siseeeeeeeeeeste...
> > > > en parlant de ca, non pas de grasse mat hier (reunion de
> > labo
> > > > ts les
> > > > mardis matin, avec tt le lab, contrairement au lundi
> matin
> > ou
> > > > on est
> > > > > 3)... Tu me diras, tu dois considerer que commencer a
> 9h30,
> > > > c'est
> > > > faire une grasse mat vu que tu commences a l'aube, toi...
> > > >
> > > > Sinon grosse dose de stress hier soir chez moi...!!! je
> me
> > > suis
> > > > retrouvee a 11pm a la porte... de ma chambre!!! verrou
> > coince
> > > > de
> > > > l'interieur, alors que je n'ai jamais locke la serrure
> > > (j'etais
> > > > a
> > > > l'exterieur...) resultat, j'ai appele le gardien, on a du
> > le
> > > > casser a
> > > > > coup de tournevis... j'en rigole maintenant, mais pas
> hier!
> > > >
> > > > > Ah, et guess what... J'ai ENFIN mon chequier!!! Je vais
> > > pouvoir
> > > > te
> > > > > rembourser des que je te vois...
> > > >
> > > > > Toi, ca va comment?
> > > >
> > > > > bizzzzzzzzzz
> > > >
> > > > > Quoting "Tourre, Fabrice" <Fabrice.Tourre@gs.com>:
> > > >
> > > > > Hello miss, bon je sais pas ce que tu as fait aux
> > > marches
> > > > ABX, mais
> > > > > apparamment tu as eu une influence certaine vu que la
> > > > > journee
> > > > > d'aujourd'hui a ete plutot calme... Ca ne m'empeche pas
> > > > > d'etre
> > > > > > bloque au boulot a 10pm, mais bon, ca ne fait que 6 ans
> > > que
> > > > je
> > > > > fonctionne avec ces horaires @$#@!$`$# so who cares
> > !!!
> > En
> > > > plus il
> > > > > faut faire du "mentoring", vu que je suis maintenant un
> > > > "dinsaure"
> > > > > dans ce business (la duree moyenne d'un employe dans ma
> > > > > boite, c'est
> > > >
```

> > > > > a peu pres  
> > > > > 2-3 ans  
> > > > > !!!)les gens me demandent plein de conseils de carriere  
> et  
> > > mon  
> > > > avis,  
> > > > > et j'ai l'impression de radoter, tout juste apres mon  
> > 28eme  
> > > > anniv  
> > > > > !!! Bon, encore 2 ans de boulot et c'est decide je  
> prend  
> > ma  
> > > > retraite  
> > > >  
> > > > > ;)  
> > > > > Au  
> > > > > fait  
> > > > > tu as fait la grasse mat ce matin ? Comment vont ton  
> > boss  
> > > et  
> > > > > ses  
> > > > > autrichiennes ?  
> > > > >  
> > > > > -----Original Message-----  
> > > > > From: Fatiha Boukhtouche [mailto:fb2204@columbia.edu]  
> > > > > Sent: Tuesday, January 30, 2007 3:46 PM  
> > > > > To: Tourne, Fabrice  
> > > > > Subject: Re: As discussed, 24 hours later...  
> > > > >  
> > > > > L'ambiance a l'air cool dis-dc a ton taf!!!... Mais vs  
> vs  
> > > > attendiez  
> > > > > pas du tout a ce que ca baisse??? Tu me saoules pas  
> avec  
> > > tes  
> > > > > histoires, je suis pas sure de tout comprendre ni de  
> > > mesurer  
> > > > les  
> > > > > csqces pr votre boite, mais bon...!!! j'aurais bien  
> aime  
> > > > > t'aider...  
> > > > > mais j'ai cherche les coordonnees sur les yellowpages  
> et  
> > > j'ai  
> > > > > pas  
> > > > > > trouve...  
> > > > > > Dc, pas sure que ca puisse arranger tes affaires ou  
> aider  
> > > ta  
> > > > survie,  
> > > >  
> > > > > mais a defaut des marches, je pourrai aussi essayer  
> > > > > d'intervenir  
> > > > > > aupres  
> > > > > > de toi de facon douce et sensuelle... ;) Just let me  
> > know  
> > > si  
> > > > > ca  
> > > > > > peut  
> > > > > > t'aider!!! Bon, carton rouge, je sors? c'est ca??? hi  
> > hi  
> > > > > hi!!!  
> > > > >  
> > > > > Bon courage en tout cas pour ta fin de journee...  
> > > > >



```
> > > > > Bizzzzzzzzzoux
> > > > >
> > > > > Quoting "Tourre, Fabrice" <Fabrice.Tourre@gs.com>:
> > > > >
> > > > >
> > > > > Au fait miss, please ne fais pas attention a mon
> > > > orthographe,
> > > > > j'ai pas
> > > > >
> > > > > > les yeux en face des trous ce soir et je me rend
> compte
> > > que
> > > > > j'ai ecrit
> > > > >
> > > > > > des enormites ;)
> > > > > >
> > > > > >
> > > > > >
> > > > > > ----- Sent from my BlackBerry
> > > > > > Wireless Handheld
> > > > > >
> > > > > > ----- Original Message -----
> > > > > > From: Tourre, Fabrice
> > > > > > To: 'fb2204@columbia.edu' <fb2204@columbia.edu>
> > > > > > Sent: Mon Jan 29 22:24:26 2007
> > > > > > Subject: Re: As discussed, 24 hours later...
> > > > > >
> > > > > >
> > > > > > Yep, le boulot est toujours aussi penible, c'est
> > bizarre
> > > j'ai
> > > > > > l'impression de venir chaque jour au taf et chaque je
> > vis
> > > le
> > > > > meme
> > > > > > calvaire - un peu comme dans un mauvais reve qui se
> > > > repete...
> > > > > En gros
> > > > > je trade un produit qui valait $100 il y a un mois,
> > et
> > > qui
> > > > > n'en
> > > > > > vaut
> > > > > > plus que $93 aujourd'hui, et qui perd en moyen $0.25
> > par
> > > > > jour...
> > > > > > Presente comme ca ca n'a pas l'air enorme, mais quand
> > tu
> > > > > penses
> > > > > > qu'on
> > > > > > achete et on vend ce truc sur des montants nominaux
> > de
> > > > > ieurs
> > > > > > milliards, ben ca commence a faire beaucoup de sous.
> > > Quand
> > > > > je
> > > > > > pense
> > > > > > > que c'est un peu moi qui est participe a la creation
> > de
> > > se
> > > > > > produit
> > > > > > (qui, soit dit en passant, est un pur produit de
> > > > > > masturbation
```

```
> > > > > intellectuelle, le genre de truc que tu inventes en
> te
> > > > > disant:
> > > > > "et si
> > > > > on creait un "machin" qui ne sert absolument a rien,
> > qui
> > > est
> > > > > completement conceptuel et hautement theorique, et
> que
> > > > > personne
> > > > > ne
> > > > > sait pricer ?"), ca fait mal a coeur de voir que ca
> > > implose
> > > > en
> > > > > vol...
> > > > > C'est un peu comme frankenstein qui se retourne
> contre
> > > son
> > > > > inventeur
> > > > > > ;)
> > > > > >
> > > > > Anyway je veux pas te saouler avec mes histoires, je
> > vais
> > > > > chercher
> > > > > dans les pages jaunes les coordonnees de l'ABX
> market,
> je
> > > te
> > > > > les
> > > > > > envoie, parceque la, je pense qu'une intervention
> > > feminine
> > > > > douce et
> > > > > > sensuelle est hautement necessaire a la survie du Fab
> > ;)
> > > > > >
> > > > > > Bizzzzes
> > > > > >
> > > > > > Fab (un petit peu en string, plutot ficelle...)
> > > > > >
> > > > > > -----Original Message-----
> > > > > > From: Tourre, Fabrice
> > > > > > To: Tourre, Fabrice
> > > > > > Sent: Jan 29, 2007 8:33 PM
> > > > > > Subject: FW: As discussed, 24 hours later...
> > > > > >
> > > > > >
> > > > > > -----Original Message-----
> > > > > > From: Fatiha Boukhtouche [mailto:fb2204@columbia.edu]
> > > > > > Sent: Monday, January 29, 2007 8:04 PM
> > > > > > To: Tourre, Fabrice
> > > > > > Subject: Re: As discussed, 24 hours later...
> > > > > >
> > > > > > Pourquoi en retard??? Primo t'es pas en retard, (on
> est
> > > > > encore
> > > > > > "demain"), et secundo, c'est pas la peine de te
> > > > justifier...
> > > > > > et ca me
> > > > >
> > > > > > fait bien plaisir de te lire!
> > > > > >
> > > > > > Aujourd'hui ca va... mieux que hier!!! Hier
> apres-midi
```

```

> > ca
> > > a
> > > > ete
> > > > > un peu
> > > > >
> > > > > > violent... mon boss est arrive 10 minutes apres moi
> au
> > > lab,
> > > > > > apparemment il avait l'air de bonne humeur, et envie
> de
> > > > > > discuter car
> > > > > > qd j'ai fini ma petite manip, il s'est gentiment
> assis
> > a
> > > > cote
> > > > > > de moi a
> > > > > >
> > > > > > mon bureau, et a commence a me parler..
> > > > > > boulot d'abord, puis m'a raconte sa vie et ses ski
> > trips
> > > en
> > > > > autriche,
> > > > > > ce qui comme tu peux t'en douter, m'interesse
> > > énormément!!!
> > > > > Bref... je
> > > > > >
> > > > > > l'ai arrete en pretextant un rdv...
> > > > > > ouf...
> > > > > > rentrage chez moi, petite sieste de 3/4 d'heure (j'ai
> > mis
> > > > mon
> > > > > > reveil...), et je suis allee rejoindre mon pote de
> > Paris
> > > et
> > > > > une
> > > > > > copine
> > > > > >
> > > > > > ici (en fait, je pense que tu la connais, Emilie,
> elle
> > > est
> > > > > > rousse,
> > > > > > elle et son copain connaissent Olivier et Marie et
> ils
> > > ont
> > > > > fait
> > > > > > qqes
> > > > > > soirees je crois avec eux et peut etre toi avant que
> > > > > > j'arrive...?).
> > > > > > Bref, j'ai bu de l'eau a l'apero, puis resto indien
> > > > > > vegetarien
> > > > > > (specialites du sud de l'inde parait il...). Et
> > ENFIN...
> > > > > > vrai dodo... j'ai dormi comme un bebe...
> > > > > > Je n'ai pas zappe ma reunion ce matin, j'etais meme
> > en
> > > > > > avance,
> > > > > > et
> > > > > > assez en forme en fait depuis ce matin!!!
> > > > > >
> > > > > > Et donc le boulot a ete dur?
> > > > > >
> > > > > > -----Original Message Truncated-----
> > > > > >
> > > > > > ----- Sent from my BlackBerry
> > > > > > Wireless Handheld

```

Fatiha

Quoting "Tourre, Fabrice" [Fabrice.Tourre@GS.com](mailto:Fabrice.Tourre@GS.com):

Hello miss, well I don't know what you've done to the ABX markets, but you must have some sort of influence since today was a relatively calm day....nevertheless I'm still stuck at work at 10PM, but it's been six years since I've been functioning on this @\$#@!\$@\$# schedule, so who cares.

On top of which I have to "mentor" others, in view of the fact that I am now considered a "dinosaur" In this business (at my firm the average longevity of an employee is about 2-3 years!!!) people ask me about career advice I feel like I'm losing my mind and I'm only 28!! OK, I've decided two more years of work and I'm retiring

[...]

From: Tourre, Fabrice  
To: 'fb2204@columbia.edu' [fb2204@columbia.edu](mailto:fb2204@columbia.edu)  
Sent: Mon Jan 29 22:24:26 2007  
Subject: Re: As discussed, 24 hours later...

Yup, work is still as laborious, it's bizarre I have the sensation of coming each day to work and re-living the same agony – a little like a bad dream that repeats itself...

In sum, I'm trading a product which a month ago was worth \$ 100 and which today is only worth \$ 93 and which on average is losing 25 Cents a day...That doesn't seem like a lot but when you take into account that we buy and sell these things that have nominal amounts that are worth billions, well it adds up to a lot of money.

When I think that I had some input into the creation of this product (which by the way is a product of pure intellectual masturbation, the type of thing which you invent telling yourself: "Well, what if we created a "thing", which has no purpose, which is absolutely conceptual and highly theoretical and which nobody knows how to price ?") it sickens the heart to see it shot down in mid-flight...It's a little like Frankenstein turning against his own inventor ;) Anyway I don't want to bore you with my stories, I'm going to look in the yellow pages for the phone number of the ABX market and I'll send it to you , because I believe that a soft and sensual feminine intervention is necessary for Fab's survival

Kisses

Fab (In string, which is rather thin)

.

---

**From:** Sparks, Daniel L  
**Sent:** Tuesday, December 05, 2006 11:55 AM  
**To:** Montag, Tom; McMahon, Bill; Ruzika, Richard  
**Subject:** Down today

Subprime market getting hit hard - hedge funds hitting street, wall street journal article.

At this point we are down \$20mm today.

Structured exits are the way to reduce risk. Our prior structured trade closes today. We are focusing on ways to do it again much faster.

.

---

**From:** Viniar, David  
**Sent:** Friday, December 15, 2006 8:57 AM  
**To:** Montag, Tom  
**Subject:** RE: Subprime risk meeting with Viniar/McMahon Summary

Yes. We spent about two hours together. Dan and team did a very good job going through the risks. On ABX, the position is reasonably sensible but is just too big. Might have to spend a little to size it appropriately. On everything else my basic message was let's be aggressive distributing things because there will be very good opportunities as the markets goes into what is likely to be even greater distress and we want to be in position to take advantage of them. Let me know if you want to catch up live.

---

**From:** Montag, Tom  
**Sent:** Friday, December 15, 2006 1:00 AM  
**To:** Viniar, David  
**Subject:** FW: Subprime risk meeting with Viniar/McMahon Summary

is this fair summary?

---

**From:** Sparks, Daniel L  
**Sent:** Thursday, December 14, 2006 11:04 PM  
**To:** Montag, Tom; Ruzika, Richard  
**Subject:** Subprime risk meeting with Viniar/McMahon Summary

Mortgage team - Gasvoda, Rosenblum, Swenson and me.  
Viniar, Bill, Brian Lee (controllers) and some risk guys.  
Ruzika on phone.

Reviewed in detail 6 areas of risk related to subprime:

ABX/CDS  
Loans  
Residuals  
CDO warehouse  
Early Payment Defaults (EPDs)  
Loan warehouse

Follow-ups:

1. Reduce exposure, sell more ABX index outright, basis trade of index vs CDS too large
2. Distribute as much as possible on bonds created from new loan securitizations and clean previous positions
3. Sell some more resids
4. Mark the CDO warehouse more regularly (had been policy to true-up quarterly) - will likely be weekly or more if necessary
5. Stay focused on the credit of the originators we buy loans from and lend to
6. Stay focused and aggressive on MLN (warehouse customer and originator we have EPDs to that is likely to fail)
7. Be ready for the good opportunities that are coming (keep powder dry and look around the market hard)

.

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**From:** Sparks, Daniel L  
**Sent:** Sunday, December 17, 2006 10:52 AM  
**To:** Montag, Tom; Ruzika, Richard; Viniar, David; McMahon, Bill  
**Cc:** Cohn, Gary (EO 85B30)  
**Subject:** Subprime update

Focuses:

1. Square position in BBB-

We made progress last week, but still more work to do. First focus on 2006 BBB- and then on reducing index vs single names basis. Below shows risk reduction trades Thursday and Friday (we also did \$650mm notional of single name risk reduction Wednesday). DV01 is between 3 and 3.2, so to get the 2006 BBB- DV01 to flat we need lay off about another \$1 billion notional.

	Notional Index	Notional Single-Names	Approx. Net DV01 (+ = Long Risk)
BBB			
2005	- 50mm		-188
2006	-100mm	- 80mm	-217
BBB-			
2005	- 60mm		+500
2006	-265mm	-315mm	+275

Biggest concerns are (1) liquidity in last 2 weeks of Dec. and ability/motivation for certain hedge funds to shove market either way with respect to year-end performance measures, and (2) noise in originator sector - more will go down (when not if). Trading desk is looking to buy puts on a few originators.

2. Recognition and aggressiveness in residential whole loan and counter-party business.

Team making and receiving full margin calls (except for MLN partial), team aggressively pursuing EPD claims and settlements, and team understanding not to rush into opportunities that are coming (e.g., we did not buy \$600mm scratch and dent package that had Friday first round bids because there is going to be a lot more coming).

3. CDO warehouse marking.

Worked with controllers and strats Friday to implement more frequent marks to CDO warehouse. Methodology conceptually agreed to, need some more time to implement. We took a \$5mm reserve on Friday in P&L. Details need to be worked out, but view is to mark to CDO execution deal by deal, and only adjust down if a deal is under-water (no deal marks up). Carry will also begin to be recognized. Note: deals would be marked, not positions assuming liquidation (which would be more volatile but not reflect actual business activity).

4. Business flows will continue - buy and securitize loans, ramp and execute CDOs. With extra focus on cleaning out left over positions.

5. Platform opportunities are coming.

---

**From:** Sparks, Daniel L  
**Sent:** Thursday, December 14, 2006 11:04 PM  
**To:** Montag, Tom; Ruzika, Richard  
**Subject:** Subprime risk meeting with Viniar/McMahon Summary

Mortgage team - Gasvoda, Rosenblum, Swenson and me.  
Viniar, Bill, Brian Lee (controllers) and some risk guys.  
Ruzika on phone.

Reviewed in detail 6 areas of risk related to subprime:  
ABX/CDS



Loans  
Residuals  
CDO warehouse  
Early Payment Defaults (EPDs)  
Loan warehouse

Follow-ups:

1. Reduce exposure, sell more ABX index outright, basis trade of index vs CDS too large
2. Distribute as much as possible on bonds created from new loan securitizations and clean previous positions
3. Sell some more resid
4. Mark the CDO warehouse more regularly (had been policy to true-up quarterly) - will likely be weekly or more if necessary
5. Stay focused on the credit of the originators we buy loans from and lend to
6. Stay focused and aggressive on MLN (warehouse customer and originator we have EPDs to that is likely to fail)
7. Be ready for the good opportunities that are coming (keep powder dry and look around the market hard)

.

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**From:** Sparks, Daniel L  
**Sent:** Wednesday, February 14, 2007 10:49 AM  
**To:** Montag, Tom; Viniar, David; Ruzika, Richard; Cohn, Gary (EO 85B30); Winkelried, Jon (EO 85B30)  
**Subject:** Post

Over the last few months, our risk reduction program consisted of:

- (1) selling index outright
- (2) buying single name protection
- (3) buying protection on super-senior portions of the BBB/BBB- index (40-100% of the index). We thought that the correlation of tranches on the very thin BBB- index was higher than where the market implied. We sold around \$3 billion in the mid-30's bp range.

Today is the first day of tranching ABX trading (TABX). We are getting greater transparency on the super-senior layer. The market is opening up in BBB-'s around +200bps. We currently have our trades from (3) above marked in the 100 bp area.

That is good for us position-wise, bad for accounts who wrote that protection (MS Prop, Peleton, ACA, Harvard), but could hurt our CDO pipeline position as CDOs will be harder to do.

ABX index pretty flat so far.

It's early.

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**From:** Sparks, Daniel L.  
**Sent:** Thursday, February 22, 2007 6:57 AM  
**To:** Birnbaum, Josh; Swenson, Michael; Lehman, David A.  
**Subject:** FW: Block size tranche protection offers for Paulson or others

Thursday.

We need to buy back \$1 billion single names and \$2 billion of the stuff below - today.  
I know that sounds huge, but you can do it - spend bid/offer, pay through the market, whatever to get it done.  
It is a great time to do it - bad news on HPA, originators pulling out, recent upticks in unemployment, originator pain.

I will not want us to trade property derivatives until we get much closer to home as it will be a significant distraction from our goal.

This is a time to just do it, show respect for risk, and show the ability to listen and execute firm directives.

You called the trade right, now monetize a lot of it.

You guys are doing very well.

---

**From:** Egol, Jonathan  
**Sent:** Wednesday, February 21, 2007 11:23 AM  
**To:** Sparks, Daniel L.  
**Cc:** Swenson, Michael; Birnbaum, Josh; Lehman, David A.; ficc-mtgcorr-desk; Salem, Deeb  
**Subject:** Block size tranche protection offers for Paulson or others

Summary of ABX-related tranches we could offer protection on if we want to close down shorts:

- \$2.4bn notional 40-100 super senior tranche off of ABX "Quadrant" trade (25% each of 06-1/06-2 BBB and BBB-), could potentially offer NC4 (we did \$1.8bn NC3 with MS Prop and \$600mm NC4 with Peloton)
- \$200mm notional 20-30 tranche off of 06-1 BBB- (open risk vs BSAM, NC3)
- \$325mm notional 30-100 super senior tranche off of 06-1 BBB- (open risk vs ACA w/ CIBC intermediation, NC5)
- \$500mm notional 40-100 super senior tranche off of 06-1/06-2 BBB- (open risk vs Harvard, non-callable)

We are currently managing ABX deltas against all of these tranches.

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Goldman  
Sachs

Jonathan M. Egol  
Structured Products Trading

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**From:** Cohn, Gary (EO 85B30)  
**Sent:** Monday, March 05, 2007 10:00 PM  
**To:** Evans, J. Michael (EO CKC68); Blankfein, Lloyd (EO 85B30); Winkelried, Jon (EO 85B30); Viniar, David; Rogers, John F.W. (EO 85B30)  
**Subject:** Re: +0.79% NK225 +1.62% HANG-SENG

Hopefully first thing

----- Original Message -----

From: Evans, J. Michael  
To: Cohn, Gary; Blankfein, Lloyd; Winkelried, Jon; Viniar, David; Rogers, John F.W.  
Sent: Mon Mar 05 21:35:31 2007  
Subject: RE: +0.79% NK225 +1.62% HANG-SENG

Before or after the opening?

-----Original Message-----

From: Cohn, Gary  
Sent: Tuesday, March 06, 2007 10:31 AM  
To: Evans, J. Michael; Blankfein, Lloyd; Winkelried, Jon; Viniar, David; Rogers, John F.W.  
Subject: RE: +0.79% NK225 +1.62% HANG-SENG

A big plus would hurt the Mortgage business but Justin thinks he has a big trade lined up for the morning to get us out of a bunch of our short risk

-----Original Message-----

From: Evans, J. Michael  
Sent: Monday, March 05, 2007 9:28 PM  
To: Cohn, Gary; Blankfein, Lloyd; Winkelried, Jon; Viniar, David; Rogers, John F.W.  
Subject: RE: +0.79% NK225 +1.62% HANG-SENG

Agreed, and the bigger the plus the better.

-----Original Message-----

From: Cohn, Gary  
Sent: Tuesday, March 06, 2007 10:25 AM  
To: Evans, J. Michael; Blankfein, Lloyd; Winkelried, Jon; Viniar, David; Rogers, John F.W.  
Subject: RE: +0.79% NK225 +1.62% HANG-SENG

Feels better but anything with a + would feel better-

-----Original Message-----

From: Evans, J. Michael  
Sent: Monday, March 05, 2007 9:21 PM  
To: Blankfein, Lloyd; Cohn, Gary; Winkelried, Jon; Viniar, David; Rogers, John F.W.  
Subject: FW: +0.79% NK225 +1.62% HANG-SENG

Fyi, looking a little better, particularly ICBC.

-----Original Message-----

From: QT@gs.com [mailto:QT@gs.com]  
Sent: Tuesday, March 06, 2007 10:10 AM  
To: Subramanian, Bala  
Subject: +0.79% NK225 +1.62% HANG-SENG

Description	Level	Change
NIKKEI 225	16773.98	+0.79%
TOPIX INDEX	1682.00	+1.16%
MTFG	1380000.00	-0.00%
MIZUHO FINL	798000.00	-0.50%

SMFG	1110000.00	-0.89%
AOZORA BANK	439.00	-1.13%
SING TELE	3.16	+0.64%
BANK OF CHINA	3.62	+0.84%
ICBC	4.11	+3.01%
HANG SENG INDEX	18966.49	+1.62%
S&P/ASX 200	5717.20	+1.12%
KOSPI 200 INDEX	180.59	+1.63%
FTSE CHINA	15236.60	-5.14%
INDIA	0.00	+0.00%
TAIWAN WEIGHTED	7396.35	+0.71%
STRAITS TIME IDX	3028.14	+1.54%
JAP GOV BD M	134.89	+0.20
E-MINI S&P M	1378.00	+5.75
US T BONDS M	113.16	-0.09
US 10YR NTE M	108.78	-0.03
US 10YR YIELD	4.524	
LIGHT CRUDE A	60.05	-0.02
NATURAL GAS A	7.29	+0.04
YEN/\$	116.33	+0.79
\$/EURO	1.30850	-0.0004
\$/GBP	1.92410	+0.0038
\$/AUD	0.77310	+0.0025

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**From:** Sparks, Daniel L  
**Sent:** Thursday, March 08, 2007 12:50 AM  
**To:** Winkelried, Jon (EO 85B30); Montag, Tom; Viniar, David; Cohn, Gary (EO 85B30); Sherwood, Michael S; McMahon, Bill; Broderick, Craig  
**Cc:** Ruzika, Richard  
**Subject:** Mortgage risk

Just spent tonight negotiating with Accredited - they plan to send us \$21mm in the morning, we have new information on loans in the warehouse line that allows us to feel comfortable raising the loan mark by \$10mm, and we will buy \$50mm of A-1 rated ABCP (Accredited vehicle) from accounts (we feel that the collateral is pretty good) that rolls Thursday which will prevent ABCP extension. Then all of our EPD claims in subprime would be resolved - we may have a small Alt A claims (probably under \$1mm). If this happens, the outcome is good. New Century remains a problem on EPD.

Aside from the counterparty risks, the large risks I worry about are listed below:

(1) CDO and Residential loan securitization stoppage - either via buyer strike or dramatic rating agency change.

On the CDO front, we have been locking people at various parts of the capital structure (with a primary focus on the super-seniors - top 50% of the deal), and rushing to get deals rated. We have liquidated a few deals and could liquidate a couple more, and we are not adding risk (we had slowed down our business dramatically in the past 4 months). Our deals break down into 2 \$1BB CDOs of A-CDOs (most risky, but good progress), 2 \$1BB AA-diversified deals (less downside, less progress), and 4 other various smaller deals. We have various risk sharing arrangements, but deal unwinds are very painful.

For residential loans, we have not bought much lately and our largest pool to securitize is Alt A (\$4.3BB). There is also \$1.3BB subprime loans and \$700mm seasoned seconds. This market is also very difficult to execute in.

(2) Dramatic credit environment downturn.

Scratch & dent loans (\$900mm), residuals (\$750mm), and less liquid bond positions - if the credit environment significantly worsens, these positions will be hurt by losses, further lack of liquidity and lower prices.

(3) Covering our shorts. We have longs against them, but we are still net short.

\$4BB single name subprime split evenly between A, BBB, BBB- and \$1.3BB of A-rated CDOs.

ABX index - overall the department has significant shorts against loan books and the CDO warehouse. The bulk of these shorts (\$9BB) are on the AAA index, so the downside is limited as the index trades at 99.

Our shorts in (3) above have provided significant protection so far, and should be helpful for (1) and (2) in very bad times. However, there is real risk that in medium moves we get hurt in all 3 areas.

Therefore, we are trying to close everything down, but stay on the short side. But it takes time as liquidity is tough. And we will likely do some other things like buying puts on companies with exposures to mortgages.

-----Original Message-----

From: Winkelried, Jon (EO 85B30)

Sent: Wednesday, March 07, 2007 1:15 PM  
To: Sparks, Daniel L; Montag, Tom; Viniar, David; Cohn, Gary (EO 85B30); Sherwood, Michael S; McMahon, Bill  
Cc: Ruzika, Richard  
Subject: Re: Originator exposures

Thanks for that summary. Not bad  
-----

Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Sparks, Daniel L  
To: Montag, Tom; Viniar, David; Winkelried, Jon; Cohn, Gary; Sherwood, Michael S; McMahon, Bill  
Cc: Ruzika, Richard  
Sent: Wed Mar 07 12:09:03 2007  
Subject: Originator exposures

Rich and I were catching up. I will send this group another message of our potential large risk areas as further stress happens, and our mitigation plans.

As for the big 3 originators - Accredited, New Century and Fremont, our real exposure is in the form of put-back claims. Basically, if we get nothing back we would lose around \$60mm vs our loans on our books (we have a reserve of \$30mm) and the loans in the trusts could lose around \$60mm (we probably suffer about 1/3 of this in ongoing exposures). The reason it is not clear is that the loans are not worth 0, there is some value, so there are estimates as to what happens on those loans.

Rumor today is that the FBI is in Accredited.

Other big risk areas I will discuss later relate to CDO and loan execution (rating agency or market shutdown), covering single name and index shorts (liquidity), and retained residuals and loan positions (if collateral performance turns worse).



.

---

**From:** Montag, Tom  
**Sent:** Wednesday, March 14, 2007 7:10 PM  
**To:** Blankfein, Lloyd (EO 85B30)  
**Subject:** FW: Cactus Delivers

Covered another 1.2 billion in shorts in mortgages--almost flat--now need to reduce risk

---

**From:** Sparks, Daniel L  
**Sent:** Thursday, March 15, 2007 8:47 AM  
**To:** Montag, Tom  
**Subject:** RE: Cactus Delivers

Stanfield - he did a great job filling our ax (Tom C has really done a good job developing this guy)

---

**From:** Montag, Tom  
**Sent:** Wednesday, March 14, 2007 7:31 PM  
**To:** Sparks, Daniel L  
**Subject:** RE: Cactus Delivers

What does that mean he brought in? Who with --what did it affect etc

---

**From:** Sparks, Daniel L  
**Sent:** Thursday, March 15, 2007 7:13 AM  
**To:** Montag, Tom; Schwartz, Harvey; Ruzika, Richard; Cohn, Gary (EO 85B30)  
**Cc:** Gmelich, Justin; Cornacchia, Thomas  
**Subject:** Cactus Delivers

Cactus Raazi did a fantastic job for the desk by bringing in \$1.2 BB in A-rated single names today.

Cornac and Gmelich were there usual outstanding contributors.

Please recognize Cactus when you get a chance.

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**From:** Sparks, Daniel L  
**Sent:** Wednesday, April 11, 2007 11:44 PM  
**To:** Gasvoda, Kevin  
**Subject:** RE: Mortgage Estimate (revised)

Does josh/swenson know you are axed?

-----Original Message-----

From: Gasvoda, Kevin  
 Sent: Wednesday, April 11, 2007 9:33 PM  
 To: Sparks, Daniel L  
 Subject: Re: Mortgage Estimate (revised)

Yes. Subprime has near zero loans and is short some mez abx and \$2B aaa abx the aaa short is painful, good jump prtction, low neg carry and capped downside (I don't think it can go to libor flat) but point wide mrkt. Plan is to chip away at covering on every chance.

-----  
 Sent from my BlackBerry Wireless Handheld (www.BlackBerry.net)

----- Original Message -----

From: Sparks, Daniel L  
 To: Gasvoda, Kevin  
 Sent: Wed Apr 11 20:31:38 2007  
 Subject: Fw: Mortgage Estimate (revised)

Subprime down 3mm from shorts? Is that right and are we too short?

----- Original Message -----

From: Bin, Ki-Jun  
 To: ficc-eod  
 Sent: Wed Apr 11 18:37:25 2007  
 Subject: Mortgage Estimate (revised)

Mortgages Estimate

Total 2,622,500  
 MTD (Including Estimate) (36,929,377)

CRE Loan Trading

	Fixed Large Loan	(175,000)	Hedges Tighter; CMJV 50/50 Split
	Floater Large Loan	1,335,000	EOP Mortgage Paydown; CMJV 50/50
Split	Fixed Conduit	(325,000)	Hedges Tighter; CMJV 50/50 Split
	Transitional Loans	32,500	
	CRE CDO		
	Warehouse		
	Muni JV		

ABS Loans & Finance  
 Consumer  
 Commercial  
 Europe  
 Warehouse

SPG Trading

ABS Trading  
 CMBS Trading 1,100,000 CMBS CDS  
 Correlation Trading 1,500,000 CDS Spread Moves

CDO/CLO

ABS/MBS CDO (1,000,000)  
 GSI SP Credit Warehouse 20,000  
 US CLO 360,000  
 EURO CLO 3,350,000  
 CRE CDO  
 Retained Principal Positions

Syndicate

ABS  
 CMBS  
 CDO

Hedges Manager's Account

Advisory Fees

Other

RMBS  
 Mortgage Derivative  
 Agency Derivatives (250,000)  
 Whole Loan Derivs  
 MSR

Residential Prime  
 FHA/VA - Primary  
 FHA/VA - Secondary  
 Subs  
 Prime Hybrid - Primary  
 Prime Hybrid - Secondary  
 Agency Hybrid 250,000  
 Prime Fixed - Primary  
 Prime Fixed - Secondary  
 Agency CMO - Primary  
 Agency CMO - Secondary 100,000

Residential Credit  
 Scratch and Dent (500,000) spread tightening  
 Subprime (2,900,000) spread tightening  
 Alt-A  
 2nd Liens (275,000) spread tightening  
 Residuals - Scratch & Dent  
 Residuals - Subprime  
 Residuals - Alt-A  
 Residuals - 2nd Liens  
 Warehouse

Tax Residuals  
 NERDS

EUROPE  
 Acquisition Finance  
 Euro CMBS

Global Special Situations

AMSSG  
 ESSG  
 ASSG

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Goldman

Sachs

Ki-Jun Bin  
Finance Division

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**From:** Sparks, Daniel L  
**Sent:** Thursday, March 08, 2007 12:50 AM  
**To:** Winkelried, Jon (EO 85B30); Montag, Tom; Viniar, David; Cohn, Gary (EO 85B30); Sherwood, Michael S; McMahon, Bill; Broderick, Craig  
**Cc:** Ruzika, Richard  
**Subject:** Mortgage risk

Just spent tonight negotiating with Accredited - they plan to send us \$21mm in the morning, we have new information on loans in the warehouse line that allows us to feel comfortable raising the loan mark by \$10mm, and we will buy \$50mm of A-1 rated ABCP (Accredited vehicle) from accounts (we feel that the collateral is pretty good) that rolls Thursday which will prevent ABCP extension. Then all of our EPD claims in subprime would be resolved - we may have a small Alt A claims (probably under \$1mm). If this happens, the outcome is good. New Century remains a problem on EPD.

Aside from the counterparty risks, the large risks I worry about are listed below:

(1) CDO and Residential loan securitization stoppage - either via buyer strike or dramatic rating agency change.

On the CDO front, we have been locking people at various parts of the capital structure (with a primary focus on the super-seniors - top 50% of the deal), and rushing to get deals rated. We have liquidated a few deals and could liquidate a couple more, and we are not adding risk (we had slowed down our business dramatically in the past 4 months). Our deals break down into 2 \$1BB CDOs of A-CDOs (most risky, but good progress), 2 \$1BB AA-diversified deals (less downside, less progress), and 4 other various smaller deals. We have various risk sharing arrangements, but deal unwinds are very painful.

For residential loans, we have not bought much lately and our largest pool to securitize is Alt A (\$4.3BB). There is also \$1.3BB subprime loans and \$700mm seasoned seconds. This market is also very difficult to execute in.

(2) Dramatic credit environment downturn.

Scratch & dent loans (\$900mm), residuals (\$750mm), and less liquid bond positions - if the credit environment significantly worsens, these positions will be hurt by losses, further lack of liquidity and lower prices.

(3) Covering our shorts. We have longs against them, but we are still net short.

\$4BB single name subprime split evenly between A, BBB, BBB- and \$1.3BB of A-rated CDOs.

ABX index - overall the department has significant shorts against loan books and the CDO warehouse. The bulk of these shorts (\$9BB) are on the AAA index, so the downside is limited as the index trades at 99.

Our shorts in (3) above have provided significant protection so far, and should be helpful for (1) and (2) in very bad times. However, there is real risk that in medium moves we get hurt in all 3 areas.

Therefore, we are trying to close everything down, but stay on the short side. But it takes time as liquidity is tough. And we will likely do some other things like buying puts on companies with exposures to mortgages.

-----Original Message-----

From: Winkelried, Jon (EO 85B30)

Sent: Wednesday, March 07, 2007 1:15 PM  
To: Sparks, Daniel L; Montag, Tom; Viniar, David; Cohn, Gary (EO 85B30); Sherwood, Michael S; McMahon, Bill  
Cc: Ruzika, Richard  
Subject: Re: Originator exposures

Thanks for that summary. Not bad  
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Sent from my BlackBerry Wireless Handheld

----- Original Message -----

From: Sparks, Daniel L  
To: Montag, Tom; Viniar, David; Winkelried, Jon; Cohn, Gary; Sherwood, Michael S; McMahon, Bill  
Cc: Ruzika, Richard  
Sent: Wed Mar 07 12:09:03 2007  
Subject: Originator exposures

Rich and I were catching up. I will send this group another message of our potential large risk areas as further stress happens, and our mitigation plans.

As for the big 3 originators - Accredited, New Century and Fremont, our real exposure is in the form of put-back claims. Basically, if we get nothing back we would lose around \$60mm vs our loans on our books (we have a reserve of \$30mm) and the loans in the trusts could lose around \$60mm (we probably suffer about 1/3 of this in ongoing exposures). The reason it is not clear is that the loans are not worth 0, there is some value, so there are estimates as to what happens on those loans.

Rumor today is that the FBI is in Accredited.

Other big risk areas I will discuss later relate to CDO and loan execution (rating agency or market shutdown), covering single name and index shorts (liquidity), and retained residuals and loan positions (if collateral performance turns worse).

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**From:** Ruzika, Richard  
**Sent:** Wednesday, March 14, 2007 11:22 AM  
**To:** Sparks, Daniel L; Winkelried, Jon (EO 85B30); Blankfein, Lloyd (EO 85B30); Cohn, Gary (EO 85B30); Viniar, David; Montag, Tom  
**Subject:** Re: Things To Read March 14, 2007 (CLEARED FOR EXTERNAL USE)

It does feel to me like the market in general underestimated how bad it could get. And now could be overestimating where we are heading.  
Four weeks ago you couldn't find a bear in the market period. Now it feels like its all doom and gloom as the longs get out.  
While undoubtedly there will be some continued spillover I'm not so convinced this is a total death spiral. In fact we may have terrific opportunities. Dan's team is working hard (literally around the clock) so we have our shot at them and to protect us the best they can.

-----  
Sent from my BlackBerry Wireless Handheld

----- Original Message -----

**From:** Sparks, Daniel L  
**To:** Winkelried, Jon (EO 85B30); Blankfein, Lloyd (EO 85B30); Cohn, Gary (EO 85B30); Viniar, David; Ruzika, Richard; Montag, Tom; Viniar, David  
**Sent:** Wed Mar 14 09:40:49 2007  
**Subject:** RE: Things To Read March 14, 2007 (CLEARED FOR EXTERNAL USE)

Trying to be smaller and buying puts on companies with exposure to the overall mortgage market.

We are also short a bunch of sub-prime AAA index for jump risk protection.  
But the piece leaves out some info that our strat team would say makes the space more balanced

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**From:** Winkelried, Jon (EO 85B30)  
**Sent:** Wednesday, March 14, 2007 8:33 AM  
**To:** Blankfein, Lloyd (EO 85B30); Cohn, Gary (EO 85B30); Viniar, David; Sparks, Daniel L; Ruzika, Richard  
**Subject:** FW: Things To Read March 14, 2007 (CLEARED FOR EXTERNAL USE)

check out the second para below. delinquencies in PRIME adjustables with teaser rates growing fast. i think this may be a big problem and a lot worse than currently thought. i think lending standards are highly variable among originators and wall street focus(servicers and dealers) on quality control has been lost for a while.

dan, are we doing things to prepare for bleed into prime space?

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**From:** GS Global Economics [mailto:GSGlobalEconomics@ln.email.gs.com]  
**Sent:** Wednesday, March 14, 2007 4:59 AM  
**Subject:** Things To Read March 14, 2007 (CLEARED FOR EXTERNAL USE)

Goldman Sachs Global Economics

## Things To Read

March 14, 2007

(CLEARED FOR EXTERNAL USE)

### GS Economic Research

#### Global Markets Daily: Potential Trends and Dislocations in EM FX

Summary: Retail sales and mortgage credit data shake markets. Risk assets come under substantial pressure and rates rally. We have been stopped out of our short Jan 2017 TIPS trade. We still think the sell-off is temporary and we are optimistic on EM FX. US inflation data on Thursday and Friday could bring about short term volatility. If risk aversion declines fast, outright long EM positions would benefit. A slower pick up in risk appetite could benefit laggards like MXN, ZAR and IDR. A high US inflation print could hurt currencies that have overshot like HUF (vs. EUR).

Report: Global Markets Daily 14 March

<https://portal.gs.com/gs/portal?action=action.doc&d=3209857>

<<https://portal.gs.com/gs/portal?action=action.doc&d=3209857>>

#### US Daily Comment: Mortgage Credit Quality Problems Go Well Beyond Subprime

Summary: New data from the Mortgage Bankers Association show that mortgage credit quality problems go well beyond the subprime sector. This can be seen from the fact that delinquencies on prime adjustable-rate mortgages are rising quickly -- much more quickly, in fact, than those on subprime fixed-rate loans. According to our (very rough) estimates, the credit quality of so-called 'teaser-rate' debt -- prime ARMs with very low initial interest rates -- is deteriorating at pace that is similar to that of subprime ARMs. Since teaser-rate ARMs typically have a longer reset schedule than subprime ARMs, this suggests that the teaser-rate problem could ultimately well exceed the subprime problem.

Report: US Daily Comment--Mortgage Credit Quality Problems Go Well Beyond Subprime 13 March

<https://portal.gs.com/gs/portal?action=action.doc&d=3208220>

<<https://portal.gs.com/gs/portal?action=action.doc&d=3208220>>

#### Asia Economics Data Flash: China data: Solid retail sales growth in January-February

Summary: Retail sales growth kept a solid pace in the first two months of the year, at 14.7% year on year (yoy), compared with 14.6% yoy in December. On a quarter-on-quarter (qoq); seasonally-adjusted; annualized basis, retail sales grew by 14.0% and 13.9% in February and January respectively. Growth of retail sales in real terms was 12.8% yoy in January-February, a notch higher than that in the same period last year (12.4% yoy), signifying stronger growth in domestic demand this year. Looking forward, we expect retail sales growth to remain strong amid robust income growth. During the NPC meeting recently, the government reiterated its policy emphasis on promoting private consumption and raising household incomes at the mid and low levels.

Report: Asia Economics Data Flash 13 March

<https://portal.gs.com/gs/portal?action=action.doc&d=3208961>

<<https://portal.gs.com/gs/portal?action=action.doc&d=3208961>>

### Other GS Research

#### Equity Trading Strategies: Tradewinds - Macro views in the US Equity Market

Report: Tradewinds 13 March

<https://portal.gs.com/gs/portal?action=action.doc&d=3208640>

<<https://portal.gs.com/gs/portal?action=action.doc&d=3208640>>



Today's Economic Events Times are shown in local time. For those with permission, expanded detail can be found on the GS Institutional Portal  
<<https://portal.gs.com/gportal/research/econ/calendartable/>>

10:30 (23:30 GMT) Australia: WMI Consumer sentiment - Mar Previous: -0.2%  
08:00 (07:00 GMT) Slovakia: Trade Balance - Jan Forecast: -SKK6.0bn  
Previous: -SKK12.40bn  
Consensus: -SKK2.7bn

Improvement on FDI and seasonality

There should be a yoy improvement as the FDI export capacity comes online (the deficit in January 2006 was SKK 8.1bn). Seasonality also helps the figure, January deficits are typically small. Because of the volatility of the trade data, there would need to be more good months to gauge the extent of the improvement.

08:45 (07:45 GMT) France: Consumer Prices - Feb Actual: +0.2% mom, 1.2% yoy  
Previous: -0.3% mom, 1.2% yoy  
Consensus: +0.4% mom

Oil and fresh food drive inflation down to 1%

\* Good surprise mainly due to oil and fresh food prices which have fallen steeply, partly due to good weather conditions. Core inflation possibly down a notch to 1.3% (HICP basis)

\* Month after month, the inflation picture is proving even more benign than expected. Inflation looks likely to remain well below 1.5% in 2007 and to reaccelerate smoothly in 2008

09:00 (08:00 GMT) Czech Republic: Producer Prices - Feb Forecast: +3.3% yoy  
Previous: +2.8% yoy  
Consensus: +2.8%

10:00 (09:00 GMT) Czech Republic: Current Account Balance - Jan Forecast: CZK1.2bn yoy  
Previous: -CZK16.3bn yoy  
Consensus: CZK3.75bn

Worse than expected outcome on profit repatriation

The focus is going to be on profit repatriation. We expect an outflow of CZK 10bn on the income line, which will contribute in our view the lower than expected surplus. The current account balance has deteriorated recently, and the currency is burdened by negative carry. We think it should weaken in the short run, especially if the appetite for it as a funding currency in carry trades is maintained.

09:30 (09:30 GMT) UK: Labour Market  
Significant Events

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09:30 (09:30 GMT) UK: Unemployment Rate - Feb Forecast: Flat  
Previous: -13k  
Consensus: -8k

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Other

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09:30 (09:30 GMT) UK: ILO Unemployment Rate - Jan Forecast: 5.5%  
Previous: 5.5%  
Consensus: 5.5%  
09:30 (09:30 GMT) UK: Average Earnings

09:30 (09:30 GMT) UK: Average Earnings - Headline Rate - 3-Mths Jan Forecast: +4.1% yoy  
 Previous: +4.0% yoy  
 Consensus: +4.0%  
 09:30 (09:30 GMT) UK: Average Earnings Ex Bonus - 3-Mths Dec Forecast: +3.9% yoy  
 Previous: +3.7% yoy  
 Consensus: +3.8%  
 11:00 (10:00 GMT) Euroland: Industrial Production - Jan Forecast: +0.4% mom  
 Previous: +1.0% mom  
 Consensus: +0.4% mom

As it's often the case, an unexpected figure, despite having most of the national data beforehand. This time most of the surprise can be tracked down to Ireland, where industrial output jumped almost 20% mom, adding 0.4% to growth in the whole Euro area. Strong growth in Italy, +2.0% mom, and France, 1.1%, were released last Friday and more than offset the German contraction (-0.6% mom). On 3-month/3-month basis, Euroland industrial production was up 0.4%, down from +0.9% qoq in Q3. Germany and France were about flat while Italy was up 1.6% and Spain +1.0%. There are some signs that point to weak industrial data in coming months: the manufacturing PMI has fallen, if moderately, in the last three months; foreign orders for German output has been flat recently; the VAT will probably induce some weakness; and our Global Leading Indicator, which has in the past signalled the direction of the area's PMI, has been showing weaker momentum for some months. Some businesses may take their chance to replenish their inventories but, overall, final demand developments should dominate.

#### Significant Events

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08:30 (12:30 GMT) USA: Import & Export Prices - Feb Forecast: n.a. mom  
 Previous: -1.2% mom  
 Consensus: +0.8%

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#### Other

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08:30 (12:30 GMT) USA: Current Account Balance - Q4 Forecast: -\$203.5bn mom  
 Previous: -\$225.6bn mom  
 Consensus: -\$203.0bn  
 14:00 (13:00 GMT) Poland: Current Account Balance - Jan Forecast: -EUR 300mn mom  
 Previous: -EUR 915mn mom  
 Consensus: -EUR 300mn

Continuing signs of a strong external position

The mild weather may have increased imports into the booming construction sector, which means that there is a slight upside risk on the trade balance side. On the financing side we expect strong FDI inflows to continue. The PLN has been struggling recently despite the very favourable external position, but we think that has to do with the low carry rather than the underlying fundamentals. We expect the currency to strengthen significantly over the following one year.

14:00 (13:00 GMT) Poland: Consumer Prices - Feb Forecast: +1.9% yoy  
 Previous: +1.7% yoy  
 Consensus: +1.9%

Increase on food prices

We are expecting somewhat higher food inflation than in January, and a still fairly supportive fuel price contribution. The change of CPI weights should not have a large impact on the outcome. Going forward, we expect a gradual increase in underlying inflation, but this will not be apparent in the summer months because of the favourable base effect. We expect a 100 bps of hikes in the next 12 months from the NBP, which is not fully priced.

08:30 (13:30 GMT) Canada: Capacity Utilization Rate - 4Q Previous: 84.2%  
08:30 (13:30 GMT) Canada: New Motor Vehicle Sales MoM - Jan Previous: +5.6%  
Significant Events

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China: Retail Sales - Feb Actual: +14.7% yoy  
Previous: +14.7% yoy

Solid retail sales growth in January-February

China data: Solid retail sales growth in January-February Retail sales growth kept a solid pace in the first two months of the year, at 14.7% year on year (yoy), compared with 14.6% yoy in December. On a quarter-on-quarter (qoq); seasonally-adjusted; annualized basis, retail sales grew by 14.0% and 13.9% in February and January respectively. Growth of retail sales in real terms was 12.8% yoy in January-February, a notch higher than that in the same period last year (12.4% yoy), signifying stronger growth in domestic demand this year. Looking forward, we expect retail sales growth to remain strong amid robust income growth. During the NPC meeting recently, the government reiterated its policy emphasis on promoting private consumption and raising household incomes at the mid and low levels. Hong Liang Helen (Hong) Qiao Yu Song

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Other

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New Zealand: Economic Survey of Manufacturing (GSJBW) - Dec 06 Qtr  
Israel: Current Account Balance - Q4 Previous: +\$2.4bn mom  
Mexico: Industrial Production - Jan Forecast: 0.15% mom  
Previous: 0.56% mom, 1.6% yoy  
(s.a.)

#### Tomorrow's Economic Events

11:30 (00:30 GMT) Australia: Employment - Feb Forecast: +20k  
Previous: -3.6k  
Consensus: +15k  
11:30 (00:30 GMT) Australia: Unemployment Rate - Feb Forecast: 4.5%  
Previous: 4.5%  
Consensus: 4.5%  
07:45 (06:45 GMT) Switzerland: Producer & Import Prices - Feb  
10:00 (08:00 GMT) Turkey: Unemployment Rate (3m MA) - Nov-Jan Previous: 9.6% yoy  
Consensus: 9.9%  
09:30 (08:30 GMT) Sweden: Unemployment Rate - Feb Forecast: 4.9%  
Previous: 5.3%  
09:30 (09:30 GMT) UK: BoE/Gfk Inflation expectations - Feb  
Significant Events

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11:00 (10:00 GMT) Euroland: Harmonised CPI - Feb Forecast: +0.3% mom, +1.8% yoy  
Previous: -0.5% mom, +1.8% yoy  
Consensus: +0.3% mom

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Other

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08:30 (12:30 GMT) USA: Empire State Manufacturing Survey - Mar Forecast: n.a.

Previous: 24.4  
Consensus: 17.0  
Significant Events

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08:30 (12:30 GMT)      USA: Producer Prices - Total - Feb    Forecast: +0.2% mom  
Previous: -0.6% mom  
Consensus: +0.5%

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Other

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08:30 (12:30 GMT)      USA: PPI - Ex Food & Energy - Feb    Forecast: +0.1% mom  
Previous: +0.2% mom  
Consensus: +0.2%  
Significant Events

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08:30 (12:30 GMT)      USA: Initial Jobless Claims    Forecast: n.a.  
Previous: 328,000  
Consensus: 325,000

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Other

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09:00 (13:00 GMT)      USA: TIC Data - Mar      Forecast: n.a.  
Previous: \$15.6bn  
Consensus: \$45.0bn  
14:00 (13:00 GMT)      Poland: Gross Average Wages - Feb    Previous: +7.8% yoy  
Consensus: +6.9%  
08:30 (13:30 GMT)      Canada: Manufacturing Shipments MoM - Jan      Previous: +1.7%  
12:00 (16:00 GMT)      USA: Philadelphia Fed Survey - Mar    Forecast: n.a.  
Previous: 0.6  
Consensus: 4.5  
18:30 (16:30 GMT)      Israel: Consumer Prices - Feb      Previous: -0.1% mom  
Turkey: Monetary Policy Meeting      Forecast: 17.5%  
Previous: 17.5%  
Consensus: 17.5%  
China: Industrial Production - Feb  
Poland: Budget Performance - Feb  
Switzerland: Central Bank Meeting    Forecast: +25bp  
Previous: +25bp  
Netherlands: Unemployment Rate - 3mths-Feb      Previous: 5.0%  
Consensus: 5.1%  
New Zealand: Key Statistics (GSJBW) - Mar 2007  
New Zealand: Non-resident bond holdings (GSJBW) - Feb 2007  
Argentina: Real GDP - 4Q2006    Forecast: 2.1% qoq, 8.7% yoy  
Previous: 2.6% qoq, 8.7% yoy  
Peru: Real GDP - Jan      Forecast: 7.5% yoy  
Previous: 9.0% yoy  
Mexico: Aggregate Supply and Demand - 4Q06      Forecast: 5.4% yoy  
Previous: 7.2% yoy  
Brazil: IGP-10 Inflation - Mar      Forecast: 0.25%  
Previous: 0.28%  
Brazil: Retail Sales - Jan      Forecast: +0.1% mom  
Previous: -0.5% mom  
(IBGE, s.a.)

Russia: Gross International Reserves - w/e Mar 9      Previous: \$315.3bn  
Colombia: Trade Balance - Jan      Forecast: US\$150mn  
Previous: US\$91.1mn

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**From:** Cohn, Gary  
**Sent:** Saturday, March 10, 2007 12:18 PM  
**To:** Blankfein, Lloyd  
**Subject:** Fw: Subprime opportunities

----- Original Message -----

From: Sparks, Daniel L  
To: Ruzika, Richard; Montag, Tom; Viniar, David; Cohn, Gary; Winkelried, Jon; Sherwood, Michael S; Forst, Edward  
Sent: Fri Mar 09 22:51:12 2007  
Subject: Subprime opportunities

This weekend we are focused on the following:

(1) Accredited - will look at investment opportunity with Cerberus. GS team includes PIA, IBD and Mortgages. Sounds like another group is considering injecting \$400mm of convertible preferred capital into Accredited as early as mid-next week. Accredited needs capital by end of week or it will trip covenants.

(2) Fremont - Gerry Ford looking, we will try to tag along and are trying to get Cerberus included. Indicative bids for the company are due Monday. IBD and Mortgages.

(3) New Century - they are in worst shape, Cerberus is looking at something and may include us, but we don't think there is much there. GS is considering making proposals on buying/financing resids that could give them some cash and allow us to offset EPD (unsecured) claims they owe us.

Things are very preliminary, and if/when we get anything close to real we will reach out to you.

We also continue to look at asset purchase opportunities - alone, with C-BASS, or maybe with others.

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**From:** Winkelried, Jon (EO 85B30)  
**Sent:** Tuesday, August 21, 2007 1:07 AM  
**To:** Sparks, Daniel L; Cohn, Gary (EO 85B30); Viniar, David; Montag, Tom; Mullen, Donald  
**Subject:** RE: Big Opportunity

Clearly and opportuntiy although we need to control what we stockpile before we sell. Need velocity thru the system. If things turn south again difficult to finance as we have seen.

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**From:** Sparks, Daniel L  
**Sent:** Monday, August 20, 2007 3:15 PM  
**To:** Cohn, Gary; Viniar, David; Winkelried, Jon; Montag, Tom; Mullen, Donald  
**Subject:** Big Opportunity

We are seeing large liquidations - we bought \$350mm AAA subprime RMBS from Solent and Cairn SIV unwinds today with prices ranging from 77 to 94 (depending on the bond specifics) - these levels price cumulative losses around 35% while ABX BBB- price cum losses in the low-to-mid teens. This is liquidity, fear and technically driven. We are also getting frequent calls from originators who need to sell loans - most recent is \$10BB from CIT.

We think it is now time to start using balance sheet and it is a unique opportunity with real upside - specifically for AAA RMBS. We've sold over \$100mm of what we bought today - most up 1-2 points.

That's a great trade - buy and flip up 1-2 points, however, we're not always going to be able to that - and there's the opportunity for us to make 5-10+ points if we have a longer term hold.

I spoke with Don and Tom this morning, and we are going to come back to them with a specific plan describing the opportunity and parameters (including funding and risk) relating to buying billions.

This is consistent with our view that the AAA ABX index is a great opportunity and we continue to like it.

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**From:** Berry, Robert  
**Sent:** Tuesday, August 21, 2007 3:37 PM  
**To:** Viniar, David; Broderick, Craig  
**Subject:** Fw: Potential large subprime trade and impact on Firmwide VAR

Fyi.

----- Original Message -----

**From:** Berry, Robert  
**To:** McMahon, Bill  
**Cc:** Dinias, Michael  
**Sent:** Tue Aug 21 10:13:09 2007  
**Subject:** Re: Potential large subprime trade and impact on Firmwide VAR

Do we have dry powder? This builds a basis risk.

I like it a lot as a customer trade - i.e. we package our short with longs on an order basis and we really reduce risk.

What is the overhang of aaa? What happens if they are downgraded? How much comes out, how cheap do they then get?

----- Original Message -----

**From:** McMahon, Bill  
**To:** Berry, Robert  
**Cc:** Dinias, Michael  
**Sent:** Tue Aug 21 09:35:14 2007  
**Subject:** FW: Potential large subprime trade and impact on Firmwide VAR

Any opinions?

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**From:** Birnbaum, Josh  
**Sent:** Tuesday, August 21, 2007 9:31 AM  
**To:** Montag, Tom; Mullen, Donald; Cohn, Gary (EO 85B30); Winkelried, Jon (EO 85B30); Viniar, David; McMahon, Bill; Sherwood, Michael S; Salame, Pablo  
**Cc:** Sparks, Daniel L; Swenson, Michael; Lehman, David A.; Birnbaum, Josh  
**Subject:** Potential large subprime trade and impact on Firmwide VAR

- The mortgage department thinks there is currently an extraordinary opportunity for those with dry powder to add AAA subprime risk in either cash or synthetic form.
- We would like to be opportunistic buyers of up to \$10Bln subprime AAAs in either cash or synthetic (ABX) form and run that long against our \$3.5Bln in mezzanine subprime shorts.
- Mortgage dept VAR would be reduced by \$75mm and Firmwide VAR would be reduced by \$25mm.
- At current dollar prices, the implied losses at the AAA level are 2.5x higher than the implied losses at the BBB level where we have our shorts (the ratio is even cheaper for cash due to technicals). If AAAs were priced consistent with BBB implied loss levels, they would be trading 5-10pts higher in synthetics and 10-15pts higher in cash.
- On the supply side, we think we can source these assets from SIVs, SIV-lites, ABCP Conduits, Sec Lenders, total return accounts.
- On the demand side, we plan to share this trade quietly with selected risk partners. We began doing so yesterday when we sold 1/3 of the AAAs purchased off the Solent list to Hayman Capital, and 100% of the AAAs from Cairn to MetWest and WAMCO.







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# **Presentation to GS Board of Directors**

## **Residential Mortgage Business**

**September 17, 2007**



# Subprime Mortgage Overview

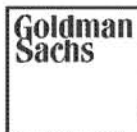
## Subprime Lending in 2006

Attribute	Description
<b>Size</b>	\$634bn annual residential mortgage loan originations (20% of total mortgage market)
<b>Lending Decisions</b>	Emphasis on borrower ability to make current payment Proliferation of affordability products to achieve lower payments for borrowers Widening out of credit to include first time home buyers Increase of alternative documentation loans in the subprime arena
<b>Geography</b>	Go national to gain operating efficiencies Technology and wholesale approach to lending break down geographic barriers Increased reliance on automation to validate appraisals in local markets
<b>Profitability</b>	Cost to produce at 102% or below Loan sold at 102 - 103% Upon sale, originators provide protection against Early Payment Default <sup>(1)</sup> ("EPD") and representation and warranty breaches

<sup>1</sup> Early payment default (EPD) occurs when a borrower fails to make the initial payment(s) due to the loan purchaser. The purchaser typically has the right to have the seller repurchase EPD loans.

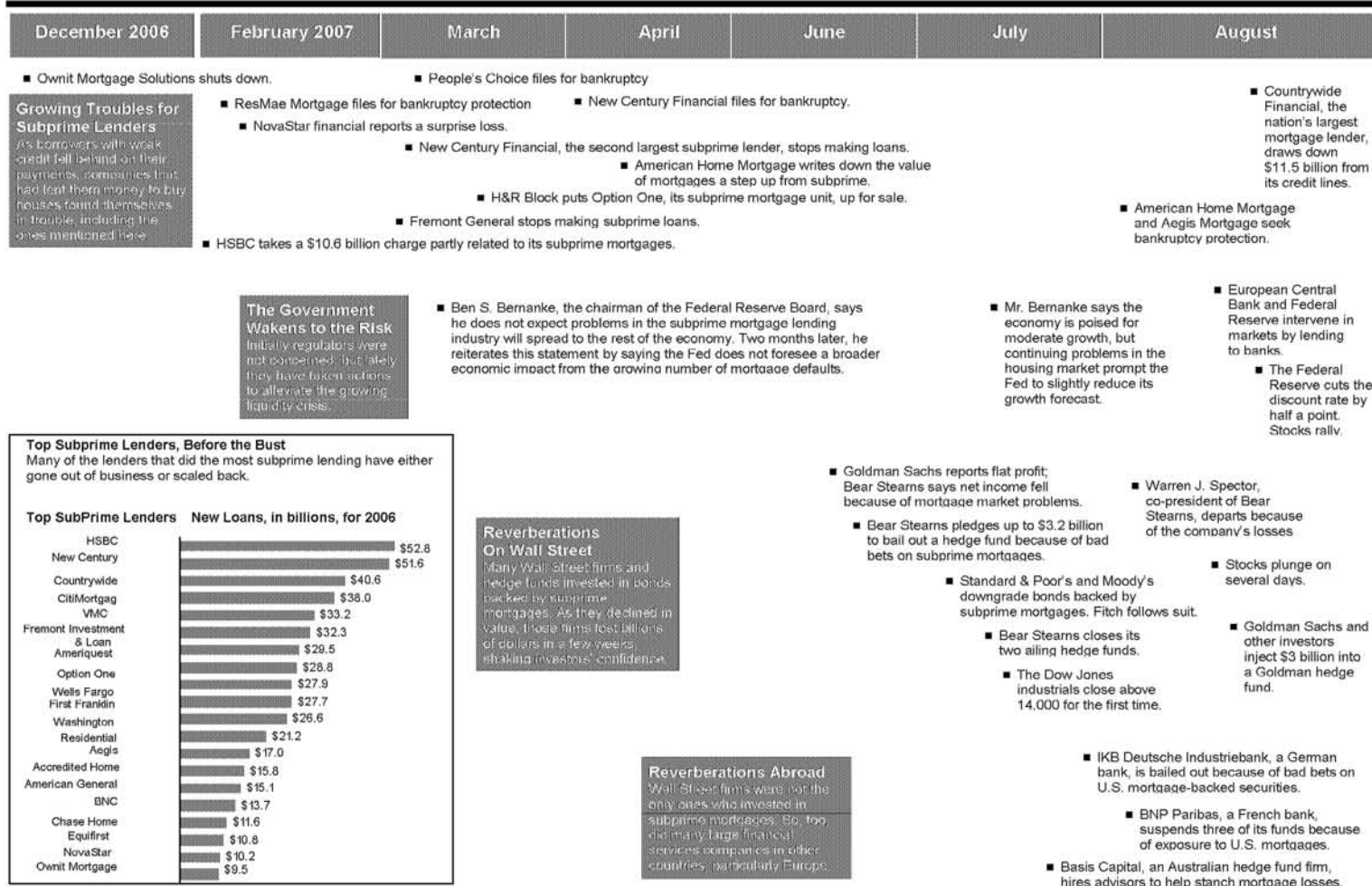
# Global Impact of the Mortgage Crisis



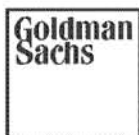


# How Missed Signs Contributed to a Mortgage Meltdown

## New York Times



Source: The New York Times, August 19, 2007

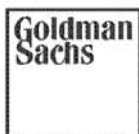


## Business Reaction

### Tactical Positioning

The business has taken proactive steps to position the firm strategically in the ensuing mortgage credit and liquidity crisis

Timing	Action
Q1 2007	<ul style="list-style-type: none"><li>■ Shut down residential mortgage warehouses</li><li>■ Reduced loan positions</li><li>■ Increased protection for disaster scenarios</li></ul>
Q2 2007	<ul style="list-style-type: none"><li>■ Shut down CDO warehouses</li><li>■ Took significant mark to market losses</li><li>■ Reduced loan purchases</li><li>■ Reduced counterparty exposure</li></ul>
Q2 2007 and Q3 2007	<ul style="list-style-type: none"><li>■ Positioned business tactically<ul style="list-style-type: none"><li>— Shorted synthetics</li><li>— Reduced loan and security purchases</li><li>— Shorted CDOs and RMBS</li><li>— Increased long correlation position</li><li>— Reduced long inventory</li></ul></li></ul>
Q3 2007	<ul style="list-style-type: none"><li>■ Actively managed risk exposure to hedge funds</li></ul>
Beginning August 2007	<ul style="list-style-type: none"><li>■ Significant covering of short positions</li><li>■ Opportunistically looking to buy assets</li></ul>



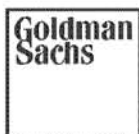
# Mortgage Business at GS

## Revenues

(\$ millions)

Product / Business	2005	2006	1Q 2007	2Q 2007	3Q 2007	YTD 2007 <sup>(1)</sup>
Residential Mortgage Loans	277	311	34	(250)	(173)	(389)
Prime	73	42	71	45	(184)	(68)
Subprime / Alt-A	204	269	(37)	(295)	11	(321)
U.S. Commercial Real Estate Loans	197	167	102	63	(26)	139
Non-Mortgage Asset-Backed Securities ("ABS")	45	40	14	19	69	102
Structured Products Trading and CDOs	245	401	174	50	731	955
Other	121	110	44	32	134	210
<b>Total Gross Revenues</b>	<b>885</b>	<b>1,029</b>	<b>368</b>	<b>(86)</b>	<b>735</b>	<b>1,017</b>

<sup>1</sup> As of 8/31/07



# GS Subprime Mortgage Business

Subprime Risk: Current Position as of 8/31/07

	Residential Mortgages	Warehouse Lending	Structured Products Trading <sup>(1)</sup>	Platforms
<b>Current Position</b>				
Long	\$1.0bn subprime loans \$0.2bn subprime residuals <sup>(2)</sup> \$0.7bn Alt-A loans \$0.3bn Alt-A residuals <sup>(2)</sup>	\$0.0bn loans funded \$0.1bn bonds funded	\$1.9bn cash RMBS \$2.5bn cash CDO \$0.0bn CDO warehouse assets \$3.6bn ABX <sup>(3)</sup>	\$25mm investments in originators
Short	\$1.8bn ABX <sup>(3)</sup> \$0.3bn RMBS CDS		\$4.9bn RMBS CDS \$3.3bn CDO CDS	
<b>03/15/2007</b>				
Long	\$2.9bn subprime loans \$0.5bn subprime residuals <sup>(2)</sup> \$3.3bn Alt-A loans \$0.5bn Alt-A residuals <sup>(2)</sup>	\$0.1bn loans funded \$0.2bn bonds funded	\$1.6bn cash RMBS \$1.0bn cash CDO \$3.0bn CDO warehouse assets	\$25mm investments in originators
Short	\$5.0bn ABX <sup>(3)</sup>		\$3.5bn RMBS CDS \$2.0bn CDO CDS \$2.2bn ABX <sup>(3)</sup>	

<sup>1</sup> Positions are netted, and matched basis trades are excluded.

<sup>2</sup> Residuals include net income margin securities and residuals

<sup>3</sup> Asset Backed Index, provides synthetic exposure to a specified bundle of cash positions





## Credit Exposure Summary

- Outstanding warehouse lines have been allowed to expire; remaining warehouse lines have minimal fundings
  - Funded amount \$60mm (down from \$1.5bn funded at 1/31/07)
- Whole loan purchases have declined substantially
- EPD risk has been reduced via aggressive collection efforts and hold backs at loan settlement

	Q12007			Q32007		
	Security (\$mm)	Whole loan (\$mm)	Expected Exposure (\$mm)	Security (\$mm)	Whole loan (\$mm)	Expected Exposure (\$mm)
Well Capitalized Institutions (1)	237.5	105.5	95.0	44.0	16.0	26.4
Thinly Capitalized Institutions (2)	126.2	148.8	96.0	73.0	16.1	20.5
Out of Business / Bankruptcy (3)	N/A	N/A	N/A	247.1	47.4	111.2
Total	363.7	253.9	191.0	364.1	79.5	158.1

- Hedge funds: established hedge fund watch list to monitor key counterparty derivative and financing exposures circulated to senior management daily (to be updated by Greg Young)



# Pricing Challenges

Issues	Considerations
Lack of Market Transparency	<ul style="list-style-type: none"><li>■ Fewer market price points</li><li>■ Non mark-to-market vehicles</li></ul>
Significant Product Complexity	<ul style="list-style-type: none"><li>■ Highly structured transactions</li><li>■ Vast number of loans or securities</li><li>■ Significant derivative component</li></ul>
Expectation Differences	<ul style="list-style-type: none"><li>■ Assumed subprime losses changed from approx. 4% to low teens</li><li>■ Dramatic shift in rating agency views</li><li>■ Change in pricing assumptions</li></ul>

GS Approach
<ul style="list-style-type: none"><li>■ Actual market trades</li><li>■ Controller focus and involvement</li><li>■ Diligent marking of clients we finance</li><li>■ Significant management involvement</li><li>■ Investment in strategies' personnel</li></ul>



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# Opportunities

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## ■ Distressed Asset Purchases

- Securities
- Whole loans

## ■ Platform Investment Opportunities

- Strategic (wholly owned)
- Financial (equity investment)

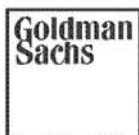
## ■ International Expansion

- Hired team from Deutsche Bank in Europe
- Allocated personnel to Brazil and Latin America



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## **Appendix A: Market Analysis**



## Independent Price Verification

- A dedicated group within Controllers performs an independent price verification of the mortgage inventory. The team is highly specialized and has extensive experience in the valuation of mortgage related products
- The investment in this team over the last several years has led to a significant reduction in the mortgage related unverified cash inventory (Nov. 2004 unverified market value of \$9.1 billion, reduced to July. 2007 unverified market value of \$2.7 billion). The close coordination of this team and desk management has ensured market movements are reflected in pricing on a timely basis and at times has lead to the remarking of positions
- The price verification results for the quarter ending 7/27/07 indicate that the mortgage inventory is marked appropriately. The marks reflect decreased liquidity within the subprime market
- Price verification analysis utilizes four core strategies:

Strategy	Implementation
External price comparison	■ Prices received from third party vendors are compared against inventory positions
Fundamental analysis	■ Utilizes discounted cash flow (DCF), option adjusted spread (OAS) or securitization analysis. Observable market data or inputs are incorporated when available and appropriate
Trade comparison	■ Utilizes a review of recent market transactions against inventory positions with similar collateral and/or risk profiles and is an important determinant of market technicals or risk premium
Collateral analysis	■ Utilizes two way collateral agreements to review pricing by market counterparts for mortgage derivatives. These agreements call for the posting of collateral against outstanding contracts when their market value falls. The exchange of collateral margin against derivative transactions is a strong indicator of market levels

# The Subprime / Home Equity Sector

## State of the Market – Originations

Top 25 Subprime Mortgage Lenders (\$ billions)

Rank	Lender	2006 Volume	Mkt. Share	Status
1	HSBC Finance, (Household) IL	\$43.13	6.80%	■ Owned by HSBC; tightens underwriting standards
2	New Century Financial, CA	\$39.40	6.21%	■ Ceased originations; filed for Ch 11 bankruptcy
3	Countrywide Financial, CA	\$30.55	4.82%	■ Downgraded; received lifeline from BOA
4	Wells Fargo Home Mortgage, IA	\$27.90	4.40%	■ Closed subprime wholesale lending unit
5	Fremont Investment & Loan, CA	\$27.88	4.40%	■ Ceased originations
6	CitiMortgage, NY	\$24.44	3.85%	■ Layoffs announced in May
7	Ameriquest Mortgage, CA	\$24.00	3.78%	■ Citi agreed to acquire wholesale origination and servicing
8	Option One Mortgage, CA	\$22.30	3.52%	■ Cerberus may purchase servicing; origination may be shut down
9	Washington Mutual, WA	\$21.49	3.39%	■ Tightens underwriting standards; eliminates 2/28s
10	First Franklin Financial Corp, CA	\$19.56	3.08%	■ Purchased by Merrill Lynch
11	Residential Funding Corp., MN	\$16.67	2.63%	■ Owned by GMAC; tightens underwriting standards
12	BNC Mortgage/Finance America, CA	\$15.38	2.43%	■ Shut down by Lehman
13	Aegis Mortgage Corp., TX	\$13.00	2.05%	■ Ceased originations; filed for Ch 11 bankruptcy
14	Accredited Home Lenders, CA	\$12.45	1.96%	■ Indication to purchase by Lone Star; unclear if sale will close
15	American General Finance, IL	\$11.57	1.82%	■ Owned by AIG; tightens underwriting standards
16	Chase Home Finance, NJ	\$8.49	1.34%	■ Tightens underwriting standards; eliminates 2/28s
17	Ownit Mortgage Solutions, CA	\$8.35	1.32%	■ Ceased operations (20% stake by Merrill)
18	NovaStar Financial, KS	\$7.59	1.20%	■ Shut down wholesale originations; severely curtailed retail
19	Equifirst, NC	\$7.47	1.18%	■ Purchased by Barclays
20	ResMae Mortgage Corp., CA	\$5.71	0.90%	■ Purchased out of bankruptcy by Citadel
21	EMC Mortgage Corp, TX	\$5.58	0.88%	■ Owned by Bear Stearns; layoffs announced
22	WMC Mortgage, CA	\$4.84	0.76%	■ Severe headcount reduction; GE announced plans to sell WMC
23	ECC Capital Corp., (Encore) CA	\$4.32	0.68%	■ Origination platform purchased by Bear Stearns
24	Fieldstone Mortgage Company, MD	\$3.79	0.60%	■ Purchased by C-BASS; wholesale unit closed
25	Nationstar Mortgage (Centex), TX	\$3.53	0.56%	■ Purchased by Fortress
Total for Top 25 Lenders		\$409.39	64.66%	
Total Subprime Originations		\$634.09	100.00%	

Source: Inside Mortgage Finance

<sup>1</sup> A business sold or up for sale may also be suspended or in bankruptcy

<sup>2</sup> Asset sale

<sup>3</sup> Unclear if sale will be completed

### Businesses Sold <sup>(1)</sup>

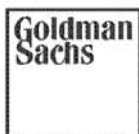
Centex Home Equity (Fortress)  
 HomeEq (Barclays)  
 MortgageIT (Deutsche Bank)  
 Saxon (Morgan Stanley)  
 First Franklin (Merrill Lynch)  
 Encore Credit <sup>(2)</sup> (Bear Stearns)  
 Champion loans (HSBC Finance)  
 Champion originations (Fortress)  
 CityMortgage (Morgan Stanley)  
 EquiFirst (Barclays)  
 ABN Amro Mortgage (Citigroup)  
 New York Mortgage (IndyMac)  
 New York Mortgage (Franklin Credit)  
 Central Pacific <sup>(2)</sup> (TMSF Holdings)  
 Fieldstone (C-BASS)  
 ResMae Mortgage (Citadel)  
 Nationstar Mortgage (Fortress)  
 ACC Capital (Ameriquest)  
 Accredited (Lone Star) <sup>(3)</sup>  
 Option One Mortgage (Cerberus) <sup>(3)</sup>

### Closed/Bankrupt/Suspended

Ameriquest Mortgage  
 Meritage Mortgage  
 Sebring Capital  
 Ownit Mortgage Solutions  
 Harbourton Mortgage  
 Millennium Capital  
 Popular Financial  
 Rose Mortgage  
 EquiBanc Mortgage  
 Summit Mortgage  
 Mortgage Lenders Network  
 ResMae Mortgage  
 New Century Financial  
 Ameritrust Mortgage  
 Fremont Investment & Loan  
 Aegis Mortgage Corp  
 SouthStarFunding LLC.  
 Fieldstone

### Up for Sale

WMC Mortgage (GE)

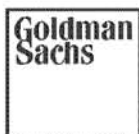


## Top Subprime Shelves by Volume as of Q1 2007

(\$ million)

Rank	Lender	2007	2006			Change 4Q06- 1Q07	Change 1Q06- 1Q07
		1Q 2007	4Q	3Q	2Q		
1	Merrill Lynch Mortgage Investors	\$10,644.3	\$8,129.3	\$6,767.8	\$7,319.4	30.9%	33.9%
2	CWABS (Countrywide)	7,796.3	8,984.0	9,700.8	8,553.5	(13.2)%	17.5%
3	Morgan Stanley ABS Capital	7,506.5	5,402.8	2,437.1	17,130.1	38.9%	(7.0)%
4	Citigroup Mortgage Loan Trust	5,574.8	3,209.3	3,885.6	957.4	73.7%	91.0%
5	Ace Securities (Deutsche)	5,136.2	4,026.3	5,167.4	4,110.3	27.6%	(13.2)%
6	Option One Mortgage Acceptance	4,950.4	1,490.3	0.0	1,480.5	232.2%	67.0%
7	GS Mortgage Securities	4,428.8	3,328.1	5,070.1	6,454.0	33.1%	(29.8)%
8	Bear Stearns ABS Inc.	4,200.5	4,038.9	1,367.5	2,629.0	4.0%	(21.5)%
9	SASCO (Lehman)	3,621.6	10,536.6	9,008.4	12,335.2	(65.6)%	(39.5)%
10	RASC (RFC)	3,507.1	1,994.1	3,540.4	3,485.4	75.9%	(12.8)%
11	SABR (Barclays)	2,506.2	4,485.0	3,234.5	1,977.9	(44.1)%	(2.1)%
12	JP Morgan Acceptance Corp	2,506.2	5,197.6	4,516.7	4,232.8	(51.8)%	(31.3)%
13	FASC (RBS GC)	2,418.4	5,617.8	5,059.7	12,892.3	(57.0)%	(31.9)%
14	WaMu Asset Acceptance	2,416.1	909.9	400.8	861.2	165.5%	NA
15	CSFB Mortgage Securities	2,129.6	2,201.3	2,442.0	2,817.4	(3.3)%	(22.5)%
<b>Top 15 Subprime Total:</b>		\$69,342.9	\$69,551.1	\$62,598.7	87,236.4	(0.19)%	(0.28)%
<b>Total Subprime MBS:</b>		\$85,858.7	\$105,620.6	\$99,919.8	\$126,712.9		

<sup>1</sup> Source: Inside B&C Lending



## Leading CDO Underwriters

Structured products (not including CMBS)

Rank	Bookrunner	First half of 2007		2006	
		Issuance	No. of Deals	Issuance	No. of Deals
1	Merrill Lynch	\$72,525.6	32	\$41,183.9	23
2	Citigroup	14,669.1	16	17,768.7	11
3	UBS	12,447.4	20	17,509.3	14
4	Goldman Sachs	8,360.3	12	16,174.9	14
5	Wachovia	7,613.0	8	15,875.0	15
6	Deutsche Bank	6,977.6	10	13,677.6	14
7	Banc of America	6,550.0	6	13,273.0	14
8	Calyon	6,453.0	5	12,643.5	19
9	Barclays Capital	5,496.0	10	10,136.9	18
10	Royal Bank of Scotland (Greenwich)	4,331.9	11	8,677.0	9
11	Credit Suisse	3,628.5	6	8,258.5	1
12	Lehman Brothers	3,493.6	12	7,012.9	10
13	Mizuho Securities	3,076.2	3	6,058.3	18
14	Societe Generale	3,004.5	1	5,736.1	23
15	WestLB	2,567.1	2	4,810.8	7
16	Bear Stearns	2,464.9	5	3,877.8	3
17	Fortis Bank	2,179.5	3	3,000.0	1
18	J.P. Morgan Chase	1,904.4	5	2,448.0	2
19	BNP Paribas	1,457.3	7	1,780.9	3
20	ICP Securities	1,414.6	2	1,708.2	18
<b>Top 20 Bookrunners</b>		<b>\$125,614.5</b>	<b>176</b>	<b>\$217,314.4</b>	<b>246</b>
<b>All Bookrunners</b>		<b>\$132,396.3</b>	<b>201</b>	<b>\$220,781.8</b>	<b>277</b>

Source: Asset-Backed Alert





## Residential Loan Competitors

Broker	Origination		Servicing	International Presence	Platform Name	Servicer Name
	Direct	Conduit				
Bear Stearns	X	X	X	X	EMC	EMC
Credit Suisse	X	X	X	X	Lime Financial	Select Portfolio Servicing
Deutsche Bank	X	X		X	MortgageIT	
Goldman Sachs	X	X	X		Senderra	Avelo
Lehman Brothers	X	X	X	X	Aurora	Aurora
Merrill Lynch	X		X	X	First Franklin	Wilshire/Home Loan Services
Morgan Stanley	X	X	X	X	Saxon	Saxon
RBS Greenwich						

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**From:** Blankfein, Lloyd  
**Sent:** Sunday, November 18, 2007 5:59 PM  
**To:** van Praag, Lucas  
**Cc:** Winkelried, Jon; Cohn, Gary; Viniar, David; Rogers, John F.W.; Horwitz, Russell  
**Subject:** RE: NYT

Of course we didn't dodge the mortgage mess. We lost money, then made more than we lost because of shorts. Also, it's not over, so who knows how it will turn out ultimately.

-----Original Message-----

From: van Praag, Lucas  
Sent: Sunday, November 18, 2007 5:47 PM  
To: Blankfein, Lloyd  
Cc: Winkelried, Jon; Cohn, Gary; Viniar, David; Rogers, John F.W.; Horwitz, Russell  
Subject: NYT

Jenny Anderson and Landon Thomas' story about how we dodged the mortgage mess is scheduled to run tomorrow. At this stage, 95% certain to be on the front page. I don't expect it to be materially different to the WSJ story on the same subject that ran last week - although it will have more color and anecdotes.

Have given John and Russell a detailed briefing and Russell will update you on the plane, but here are a few points:

1. GS Gives in not in the story. I have agreed to brief Jenny thoroughly on it tomorrow and expect the news to run either Tues or Wed. I think it would be good if you had a 5 min phone call with her on the subject and I'll liaise with Russell on timing. We will issue the press release to coincide with publication of her article and will actively work with other media, esp in the UK, to make sure the message is spread and picked up effectively.
2. Tomorrow's story will, of course, have 'balance' (ie stuff we don't like). In this instance, we have spent much time discussing conflicts, and I think we've made some progress as she acknowledges that most of her sources on the subject are financial sponsors which fact, unless edited out, is included and gives context.
3. The article references the extraordinary influence GS alums have - the most topical being John Thain, but Rubin, Hank, Duncan et al are all in the mix too. She hasn't gone as far as suggesting that there is a credible conspiracy theory (unlike her former colleague at the NY Post). She does, however, make the point that it feels like GS is running everything.
5. We spent a lot of time on culture as a differentiator - she was receptive.
4. She has used several remarks you made at the ML conference on the record - which is fine.

If anything changes, I'll let you know. / L

This email has been sent from my Blackberry.

# How Did GS Avoid the Mortgage Crisis?

## Our Response

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Mortgages is an important business for Goldman Sachs. However, it is typically the smallest of five main businesses within FICC and therefore, on a relative basis, it has been a smaller contributor to overall Fixed Income revenues than for many of our peers. We always proactively manage the risk of our businesses, and our mortgage business was no different. We were actively managing our mortgage exposure throughout 2006, and towards the end of the year we became increasingly concerned about the sub-prime market. As a result we took a number of actions at that time and into early 2007 to reduce our risk. In the first quarter of 2007 we stopped our residential mortgage warehousing efforts, shut down our CDO warehouses, aggressively reduced our inventory positions, reduced counterparty exposure and increased our protection for disaster scenarios.

Key to our ability to do this was our extremely robust mark to market philosophy. You simply cannot manage risk effectively if you don't know what positions are worth. An accurate daily marking process makes difficult decisions considerably easier, as you tangibly feel the cost of inaction everyday as the market declines. We have extensive price discovery and valuation resources and don't subscribe to the notion that there are instruments that can't be valued.

So, we knew the value of what we had and managed our risk accordingly. However, one should not be lead to believe that we went through this period unscathed and somehow significantly profited from a "bet" on the downturn in mortgage markets. The actions that I outlined led to significant write-downs in the value of our long mortgage inventory over the course of this year. We mentioned during our second quarter conference call that a weak quarter in Mortgages contributed to lower results in our FICC businesses. A better characterization of the situation is that we effectively avoided greater losses by taking these proactive steps and in fact during the third quarter we were able to make money on mortgages as a result of our net short position. As a consequence, we believe that we are well-positioned to opportunistically participate in the inevitable restructuring of the mortgage market.

Ultimately, our ability to be proactive was a function of our people and our risk management culture. Given the complexity and diversity of risks in our business, we believe that it is critical to provide our teams with the confidence and support necessary to identify and escalate issues as soon as possible and to prioritize the interest of the entire firm over any individual objectives. In addition, we think it is important for senior leadership to be actively engaged in the business flows and decision making process, in times of calm as well as crisis.

# Quarterly Breakdown of Mortgage P/L

Business (USD Millions)	Q1 2007				Q2 2007				Q3 2007				Q4 2007				October 26, 2007 FYTD			
	Loan/ Security	Derivs	Other/ UW	Total	Loan/ Security	Derivs	Other/ UW	Total	Loan/ Security	Derivs	Other/ UW	Total	Loan/ Security	Derivs	Other/ UW	Total	Loan/ Security	Derivs	Other/ UW	Total
	P&L	P&L	P&L		P&L	P&L	P&L		P&L	P&L	P&L		P&L	P&L	P&L		P&L	P&L	P&L	
Residential Prime	\$ 65	\$ (0)	\$ -	\$ 65	\$ 48	\$ (0)	\$ -	\$ 48	\$ (252)	\$ 33	\$ -	\$ (219)	\$ (76)	\$ (42)	\$ -	\$ (118)	\$ (218)	\$ (9)	\$ -	\$ (224)
Residential Credit	\$ (248)	\$ 213	\$ -	\$ (36)	\$ (239)	\$ (60)	\$ -	\$ (299)	\$ (641)	\$ 358	\$ (27)	\$ (311)	\$ (193)	\$ 63	\$ 26	\$ (103)	\$ (1,321)	\$ 574	\$ (1)	\$ (749)
Alt-A	(31)	56	-	25	10	(16)	-	(5)	(201)	111	(7)	(98)	(99)	(21)	7	(113)	(321)	130	-	(191)
S&D	(51)	13	-	(37)	(39)	(11)	-	(50)	(104)	108	16	20	(42)	13	(16)	(45)	(236)	124	-	(112)
Subprime	(167)	144	-	(23)	(210)	(34)	-	(244)	(336)	138	(36)	(233)	(51)	71	35	54	(764)	319	(1)	(446)
SPG Trading	\$ (60)	\$ 359	\$ (1)	\$ 298	\$ (103)	\$ 546	\$ 9	\$ 452	\$ (724)	\$ 2,850	\$ 7	\$ 2,133	\$ (133)	\$ 842	\$ (1)	\$ 708	\$ (1,019)	\$ 4,596	\$ 15	\$ 3,591
ABS Securities	(58)	290	-	232	(63)	480	-	417	(646)	1,916	19	1,288	(96)	479	(22)	362	(863)	3,185	(3)	2,299
CMBS Securities	(1)	5	-	4	(24)	22	-	(2)	(48)	173	(11)	113	(14)	156	11	153	(87)	355	(0)	267
Correlation	(1)	64	(1)	62	(18)	44	9	37	(29)	761	(0)	732	(23)	206	10	193	(69)	1,076	17	1,024
CDO/CLO	\$ (170)	\$ (0)	\$ 23	\$ (147)	\$ (307)	\$ (175)	\$ 29	\$ (453)	\$ (944)	\$ 120	\$ (74)	\$ (898)	\$ (208)	\$ 19	\$ 70	\$ (120)	\$ (1,629)	\$ (37)	\$ 48	\$ (1,618)
US/Euro CRE Loans	58	(0)	-	58	47	(0)	-	46	(177)	122	49	(7)	14	8	-	22	(58)	128	49	119
Other*	28	-	6	33	19	-	13	32	1	-	41	43	43	-	0	43	91	-	60	151
Grand Total	\$ (327)	\$ 671	\$ 28	\$ 272	\$ (636)	\$ 310	\$ 61	\$ (174)	\$ (2,737)	\$ 3,482	\$ (4)	\$ 741	\$ (563)	\$ 889	\$ 86	\$ 432	\$ (4,162)	\$ 6,262	\$ 171	\$ 1,271

\*Included in Other are gains earned in conjunction with bond U/W (+\$70 million) and transfers from AMSSG (+\$46 million)

# GS Subprime Mortgage Business

Subprime Risk: Current Position as of 11/2/07

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<b>Mortgage Department</b>		
<b><i>SUBPRIME</i></b>	<b><i>Current Notional (Bn)</i></b>	<b><i>Market Value (Bn)</i></b>
Securities (IG)	2.3	1.2
Subs & Residuals	0.1	0.1
Loans	0.3	0.3
Single-Name Synthetic Risk (Net)	2.7	1.6
TABX & Tranched Synthetic Risk (Net)	(3.1)	(0.9)
<b>Net</b>	<b>2.3</b>	<b>2.4</b>
 <b><i>ALT-A</i></b>		
Securities (IG)	4.3	3.8
Subs & Residuals	0.3	0.2
Loans	0.1	0.1
Synthetic Risk (net)	(1.7)	(1.3)
<b>Net</b>	<b>3.0</b>	<b>2.8</b>
 <b><i>SCRATCH &amp; DENT</i></b>		
Loans	0.9	0.5
 <b><i>CDOs / TRANCHE RISK</i></b>		
Securities	2.1	0.3
Single-Name Synthetic Risk (Net)	(1.2)	(0.4)
Tranched Synthetic Risk (Net)	(5.4)	(3.0)
Seasoned Super Senior Shorts	(3.5)	(3.4)
<b>Net</b>	<b>(7.9)</b>	<b>(6.4)</b>

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# Subprime Mortgage Business Comparisons

MER, C, UBS releases compared with GS Position as of 11/02/07

Merrill Lynch <sup>1</sup>		Goldman Sachs
Subprime	\$5.7Bn US Subprime mortgage related exposure	\$2.4Bn US Subprime mortgage related market value
CDO/Warehouse	\$15.2Bn ABS CDO related exposure	(\$6.4Bn) ABS CDO related market value

Citigroup <sup>2</sup>		Goldman Sachs
Subprime	\$11.7Bn US Subprime mortgage related exposure	\$2.4Bn US Subprime mortgage related market value
CDO	\$43Bn exposure to senior CDO tranches	(\$5.1Bn) market value of senior CDO tranches

UBS <sup>3</sup>		Goldman Sachs
Subprime	\$16.8Bn Subprime Securities	\$1.2Bn Subprime Securities market value
CDO	\$20.2Bn notional exposure to senior CDO tranches	(\$5.1Bn) market value of senior CDO tranches

<sup>1</sup> Goldman Sachs Subprime exposure includes our net exposure to subprime loans, bonds, and derivatives while our CDO/Warehouse exposure includes our net exposure to CDO bonds and derivatives. GS does not have any current CDO warehouse exposure. We are interpreting ML's exposure to be net market value and are reporting the same measure for GS.

<sup>2</sup> Goldman Sachs Subprime exposure includes our net exposure to subprime loans, bonds, and derivatives while our CDO exposure includes our net exposure to senior CDO bonds and derivatives. We are interpreting Citigroup's exposure to be net market value and are reporting the same measure for GS.

<sup>3</sup> Goldman Sachs Subprime exposure includes our net exposure to subprime loans, bonds, and derivatives while our CDO exposure includes our net exposure to senior CDO bonds and derivatives. We are interpreting UBS's Subprime exposure to be net market value and their CDO exposure to be notional and are reporting the same measures for GS.

## Mortgage VaR Change (Q1'07 vs. Q4'06)

Daily Mortgage VaR increased from \$13mm to \$85mm between 11/24/06 and 2/23/07, largely driven by an increase in SPG Trading desk. The risk increase in SPG Trading desk was primarily driven by a combination of increased volatility in ABX market and the desk increasing their net short risk in RMBS subprime sector.

	Daily VaR (\$mm)		
	23-Feb	24-Nov	Diff
<b>Mortgages</b>	<b>85</b>	<b>13</b>	<b>72</b>
Derivatives	3	3	-
Residential Prime	3	3	-
Residential Credit	7	3	4
Non-Resi Origination	2	2	-
SPG Trading	90	7	83
CDO/CLO	13	2	11
Acquisition Commitment	6	7	(1)
European Mortgages	1	1	-
CDO Warehouse	2	2	-

As can be seen from the table below, the volatility of ABX index increased substantially over the quarter, for example, daily volatility of ABX "BBB-" index increased from 5 bps to 53 bps. During the same period, ABX "BBB-" spread widened from 300 bps to 1500 bps.

	Daily Volatility in bps		
	23-Feb	24-Nov	Diff
<b>BBB-</b>	53	5	48
<b>BBB</b>	45	4	41
<b>A</b>	18	1	17
<b>AA</b>	1.7	0.3	1
<b>AAA</b>	1.3	0.2	1

Furthermore, SPG Trading desk started off the quarter with long ABX "BBB-" risk to the tune of \$1.8mm/bp, hedged with "AAA/A" rated ABX indices and single name CDS. Over the quarter, desk reduced its long ABX "BBB-" risk by \$1.3mm/bp and increased their single name CDS hedges.

2/23/2007				11/24/2006				Difference			
Rating	Spread DV01 (\$K/bp)			Rating	Spread DV01 (\$K/bp)			Rating	Spread DV01 (\$K/bp)		
	Single Name CDS	ABX	Total		Single Name CDS	ABX	Total		Single Name CDS	ABX	Total
AAA	(67)	(11)	(78)	AAA	(103)	(816)	(919)	AAA	36	805	841
AA	23	108	131	AA	(43)	6	(37)	AA	66	102	168
A	(1,284)	(534)	(1,817)	A	(624)	(455)	(1,079)	A	(659)	(79)	(738)
BBB	(503)	(332)	(835)	BBB	(236)	161	(74)	BBB	(267)	(493)	(761)
BBB-	(686)	479	(207)	BBB-	(704)	1,785	1,081	BBB-	19	(1,307)	(1,288)
BB	(16)		(16)	BB	(19)		(19)	BB	3	-	3
<b>Total</b>	<b>(2,632)</b>	<b>(290)</b>	<b>(2,822)</b>	<b>Total</b>	<b>(1,730)</b>	<b>682</b>	<b>(1,048)</b>	<b>Total</b>	<b>(802)</b>	<b>(972)</b>	<b>(1,775)</b>

positive number means long credit

### **Significant Cash Inventory Change (Q1'07 vs. Q4'06)**

- **Mortgage Residuals:** The size of total residuals inventory across Alt-A, Subprime, Second Lien and S&D space over the quarter increased from \$555mm to \$700mm, mostly due to new securitization activities.
- **Residential Credit Loans:** The overall loans inventory decreased from \$11bn to \$7bn. Alt-A loans increased from \$2.9bn to \$3.8bn, subprime loans decreased from \$6.3bn to \$1.5bn, Second Liens decreased from \$1.5bn to \$0.7bn and S&D Loans remained unchanged at \$0.8bn.
- **Acquisition Commitment:**
  - **EOP:** At the start of the quarter, GS was long \$9.87bn senior & mezzanine debt commitment and \$1.17bn bridge equity. Post funding in Feb, we ended the quarter being long \$2bn mezzanine & \$2.5bn senior debt and \$0.8bn equity risk.



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**From:** Sparks, Daniel L  
**Sent:** Wednesday, February 14, 2007 6:33 AM  
**To:** Sparks, Daniel L  
**Subject:** Risk

Over var due to massive spike in subprime volatility and we are working with bruce on that.  
Over limit on cre loan scenario list but will correct next week with large securitization pricing.  
Over limit on cdo risk but that will adjust as moving positions to desks.

Bad week in subprime

collateral performance on loans was poor - we took a write-down on second lien deals and on the scratch and dent book last week

News was bad - hsbc and new century announcements

Synthetics markets got hammered - around 150 wider

Trading desk had sold significant risk in the form of index, tranced index, and single names - so it has gotten on the short side.

Lag on the pricing of single name synthetics vs the index, and transparency is difficult with the volatility.

Trading desk feels like it is been very conservative in the mark and has significant work to do in getting transparency, working with controllers for upcoming quarter end, and covering the single names.

Loan books are hedged with abx so spread protection there.

Residuals have abx also, but that is much more monthly performance issue.

Loan preformance will play out for a long time.

Originators are really in a bad spot. Thinly capitalized, highly levered, dealing with significant loan put-backs, some with retained credit risk positions, now having trouble selling loans above par when it cost them 2 points to produce.

Will have to, and are, really tighten credit standards which will cut volume significantly.

Warehouse lines we have to originators - we are aggressively marking there positions which have resulted in 3 things:

Margin calls - which they have made

Clients moving loans to other dealers' lines Relationship damage

What is the next area of contagion.

Cdo's - which have been the buyer of most single name mezz subprime risk for the past year.

We significantly reduced our deal ramp up starting 2 months ago, but we do have warehouse risk and are doing 4 things:

Finding warehouse risk partners

Combining business with secondary trading desk so all risk housed and managed by traders

Buying protection on cdo's Executing deals

Portions of the alt a market - spending time on it.

What for the few months is not being effected is the commercial real estate markets.

Eop closed friday, we started marketing monday and early on it feels very good. Blackstone is selling so many assets we may end up selling and securitizing only half the deal by late march. Equity bridge is only particially funded and expextation is for \_\_\_\_\_.

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**From:** Sparks, Daniel L  
**Sent:** Wednesday, February 21, 2007 10:09 PM  
**To:** Winkelried, Jon (EO 85B30)  
**Subject:** RE: Mortgages today

Bad news everywhere. Novastar (another subprime originator) bad earnings and 1/3 of market cap gone immediately. Wells laying off 300+ subprime staff and home price appreciation data showed for first time lower prices on homes over year broad based. Index over 100 wider last week and this week. CDOs starting to widen.

We are net short, but mostly in single name CDS and some tranching index vs the some index longs. We are working to cover more, but liquidity makes it tough. Volatility is causing our VAR numbers to grow dramatically.

-----Original Message-----

**From:** Winkelried, Jon (EO 85B30)  
**Sent:** Wednesday, February 21, 2007 6:09 PM  
**To:** Sparks, Daniel L  
**Subject:** Re: Mortgages today

Give a few details if get a chance. I've been on the road in europa all week with clients so out of touch with it

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Sent from my BlackBerry Wireless Handheld

----- Original Message -----

**From:** Sparks, Daniel L  
**To:** Winkelried, Jon  
**Sent:** Wed Feb 21 17:50:13 2007  
**Subject:** RE: Mortgages today

Very large - it's getting messy

-----Original Message-----

**From:** Winkelried, Jon (EO 85B30)  
**Sent:** Wednesday, February 21, 2007 4:44 PM  
**To:** Sparks, Daniel L  
**Subject:** Re: Mortgages today

Another downdraft?

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Sent from my BlackBerry Wireless Handheld

----- Original Message -----

**From:** Sparks, Daniel L  
**To:** Montag, Tom; Ruzika, Richard; McMahon, Bill; Smith, Sarah; Lee, Brian-J  
**Cc:** Cohn, Gary; Winkelried, Jon; Viniar, David; Gmelich, Justin; Gasvoda, Kevin  
**Sent:** Wed Feb 21 16:43:10 2007  
**Subject:** Mortgages today

Commercial Mortgage	+30mm (50/50 FICC/IBD)
Single names	+60mm
Index	(42)mm
Index tranches/index	flat
CDO CDS	+25mm

CDO positions	(5)mm	
CDO warehouse	(5)mm	
Other		+6
Total		+54 to FICC (+69 to firm)

Market sold off significantly (BBB and BBB- indices over 100 bps wider)

We covered over \$400mm single names - still significant work to do.

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**From:** McMahon, Bill  
**Sent:** Wednesday, August 15, 2007 2:08 PM  
**To:** Cohn, Gary (EO 85B30)  
**Cc:** Viniar, David  
**Subject:** RE: Trading VaR \$165mm

The volatilities and correlations among our assets are really driving the swings in var right now. Robert Berry sent out a note last night indicating that the sensitivity of our var models to correlations suggests that the var can swing between 140 and 160 without any changes in the complexion of our trading books - essentially, it is noise. The only solution is to reduce the size of the books, which is what we are working on with mortgages and credit trading. In credit trading, in Ram's book, we are long 1.1 dv01 by short 3.4 dv01. He is reducing his short by 550 dv01 today (in monolines, brokers and IG index), and we are trying to figure out how much of his remaining short he needs against other commitments he has which ARE NOT showing up on his long side. Don and I are meeting with the mortgage guys today, and will share with you the plan in that book after its is finalized.

-----Original Message-----

**From:** Cohn, Gary (EO 85B30)  
**Sent:** Wednesday, August 15, 2007 1:43 PM  
**To:** Dinias, Michael; Viniar, David; Montag, Tom; Sherwood, Michael S; Broderick, Craig; Berry, Robert; Mullen, Donald; Sparks, Daniel L; McMahon, Bill; Petersen, Bruce; Wilson, Edward  
**Subject:** Re: Trading VaR \$165mm

There is no room for debate - we must get down now

----- Original Message -----

**From:** Dinias, Michael  
**To:** Viniar, David; Cohn, Gary; Montag, Tom; Sherwood, Michael S; Broderick, Craig; Berry, Robert; Mullen, Donald; Sparks, Daniel L; McMahon, Bill; Petersen, Bruce; Wilson, Edward (ED, 1NYP/042)  
**Sent:** Wed Aug 15 13:41:22 2007  
**Subject:** Trading VaR \$165mm

Trading VaR increased \$16mm, from \$149mm to \$165mm, versus \$150mm limit.

Mortgage VaR increased \$14mm, from \$96mm to \$110mm. Mortgage risk increase was driven almost entirely from wider spreads/markdowns on ABS CDOs.

Credit Trading VaR increased \$2mm, from \$79mm to \$81mm.

Credit Origination VaR increased \$1mm, from \$62mm to \$63mm.

Interest Rate Product VaR now stands at \$144mm.